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the central Venezuela Basin in 5050 m water depth. Sediments consisted of interbedded turbidite and pelagic sediments. Location 3 ( $13^{\circ}30'N$ ,  $64^{\circ}45'W$ ) was on the western flank of the Aves Ridge in 3500 m water depth. Sediments were predominantly hemipelagic in origin.

Values of porosity, grain size, percent  $CaCO_3$ , organic carbon and nitrogen, shear strength, color, compressional wave velocity, and attenuation were determined from 6.1 cm inside diameter cylindrical subcores. X-radiographs of 36 x 44 x 3 cm rectangular acrylic subcores were made to determine sedimentary/biological structure. Probes used to measure shear strength and compressional wave velocity were occasionally inserted into whole box cores for additional measurements. The color of freshly collected sediments from whole box cores was also noted.

In this report we present the entire data set in table form. Methods of collection and subsequent laboratory and computational analysis are presented in detail. The data presented here will be the subject of more detailed analysis in future publications.

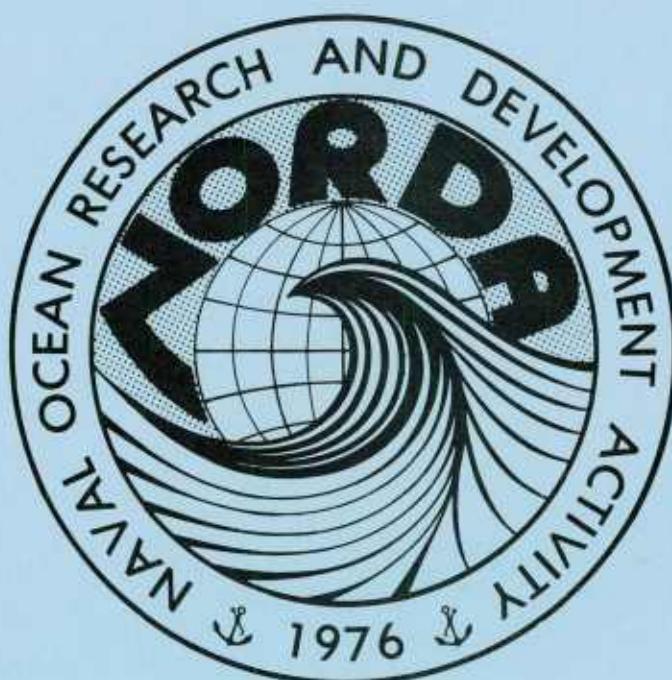
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Naval Ocean Research and  
Development Activity  
NSTL, Mississippi 39529



# Physical and Acoustical Properties of Surface Sediment from Venezuela Basin: A Data Report



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Kevin Briggs  
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Oceanography Division

January 1984

## EXECUTIVE SUMMARY

Physical and acoustic properties of surface sediments collected with a 0.25-m<sup>2</sup> box core were measured from 45 stations in the Venezuela Basin. Samples were collected from three locations representing different sedimentary provinces in addition to transects between the locations. Location 1 (15°07'N, 69°22'W) was on the eastern slope of the Beata Ridge in 3950 m water depth. Sediments were pelagic foraminifera ooze. Location 2 (13°45'N, 67°45'W) was in the central Venezuela Basin in 5050 m water depth. Sediments consisted of interbedded turbidite and pelagic sediments. Location 3 (13°30'N, 64°45'W) was on the western flank of the Aves Ridge in 3500 m water depth. Sediments were predominantly hemipelagic in origin.

Values of porosity, grain size, percent CaCO<sub>3</sub>, organic carbon and nitrogen, shear strength, color, compressional wave velocity, and attenuation were determined from 6.1 cm inside diameter cylindrical subcores. X-radiographs of 36 x 44 x 3 cm rectangular acrylic subcores were made to determine sedimentary/biological structure. Probes used to measure shear strength and compressional wave velocity were occasionally inserted into whole box cores for additional measurements. The color of freshly collected sediments from whole box cores was also noted.

In this report we present the entire data set in table form. Methods of collection and subsequent laboratory and computational analysis are presented in detail. The data presented here will be the subject of more detailed analysis in future publications.

## ACKNOWLEDGMENTS

The authors wish to acknowledge the assistance of the ships' captains and crews of the R/V GYRE (cruise 79G7), USNS LYNCH (cruise 708-80), and USNS BARTLETT (cruise 1301-82). We also wish to thank all of the scientific colleagues who participated in the aforementioned cruises. Without their support a project of this scope would have been impossible. Thanks to David C. Young, Frank Carnaggio, and James Matthews for designing and fabricating the compressional wave velocity probes. Special thanks are extended to Skidaway Institute of Oceanography and Steve Bishop, in particular, for use of the CHN analyzer and to NAVOCEANO for the training and use of the Micromeritics Particle Size Analyzer. We thank Richard Ray for the compilation of data exhibited in Appendix A and David K. Young for careful review of the manuscript. This work was supported by Program Element 61153N; Ralph R. Goodman and James E. Andrews, Program Managers.

## CONTENTS

LIST OF ILLUSTRATIONS	iv
LIST OF TABLES	iv
I. INTRODUCTION	1
II. MATERIALS AND METHODS	1
A. SITE SELECTION	1
B. FIELD COLLECTION	3
C. FIELD ANALYSIS	7
D. LABORATORY ANALYSIS	15
III. RESULTS	18
IV. REFERENCES	19
APPENDIX A--SEDIMENT ACOUSTIC AND PHYSICAL PROPERTY DATA FROM BOX CORES COLLECTED IN THE VENEZUELA BASIN	21
APPENDIX B--FREQUENCY HISTOGRAMS OF GRAIN SIZE DISTRIBUTION DATA FOR SEDIMENTS COLLECTED IN BOX CORES FROM THE VENEZUELA BASIN	19
APPENDIX C--X-RADIOGRAPHS OF SEDIMENTS COLLECTED FROM THE VENEZUELA BASIN	233
APPENDIX D--COLOR DESCRIPTIONS OF CORES	253
APPENDIX E--COMPRESSIVE WAVE VELOCITY PROBE DATA	257
APPENDIX F--SEDIMENT SHEAR STRENGTH MEASURED WITH HAND-HELD VANE SHEAR PROBE	263

## ILLUSTRATIONS

Figure 1.	Location of sampling sites in the Venezuela Basin	2
Figure 2A.	MK III box corer ready to deploy	6
Figure 2B.	Deployment of box corer from rear U-frame of USNS BARTLETT	6
Figure 2C.	Retrieval of box corer containing bottom sediment sample	6
Figure 2D.	Subcoreing of box core sample after detachment of box core and spade from box corer with aid of cart	6
Figure 3.	Block diagram of compressional wave velocity probe measuring system	10
Figure 4.	Line drawing of compressional wave velocity probes	10
Figure 5.	Block diagram of sediment core compressional wave velocity and attenuation measuring system	13

## TABLES

Table 1.	Location, depth, date, and time of collection for the 68 box core stations occupied in the Venezuela Basin	4
Table 2.	Listing of subcores collected from 45 box core samples obtained for physical/acoustic properties analysis	8

## I. INTRODUCTION

This report presents data on the horizontal and vertical distribution of surface sediment physical and acoustic properties. The data was collected in an investigation of the effects of biological processes on the physical and acoustic properties of deep-sea sediments. Results from the biological collections will be included in subsequent reports. The entire data set on the following sediment properties is printed in the form of tables: porosity, grain size distribution, percent calcium carbonate ( $\text{CaCO}_3$ ), organic carbon and nitrogen, shear strength, color, and sedimentary/biological structure, sediment compressional wave velocity, and attenuation. Methods of collection and subsequent laboratory and computational analysis are presented in detail. The data presented here will be the subject of more detailed analysis in future publications. The purpose of the report is to make the bulk of the sediment data available as rapidly as possible to others involved with this study.

## II. MATERIALS AND METHODS

### A. Site Selection

Three locations representing different sedimentary provinces in the Venezuela Basin were selected for study (Fig. 1). Location 1 was on the eastern part of the Beata Ridge ( $15^{\circ}07'N$ ,  $69^{\circ}22'W$ ) in 3950 m water depth. Sediments were pelagic foraminifera ooze. Location 2 was in the central Venezuela Basin in 5050 m water depth and centered about  $13^{\circ}45'N$ ,  $67^{\circ}45'W$ . Sediments were interbedded turbidite depositions and pelagic sediments. Location 3 was on the eastern flank of the Aves Ridge in a hemipelagic sedimentary province in 3500 m water depth and centered about  $13^{\circ}30'N$ ,  $64^{\circ}45'W$ .

A total of 99 stations were occupied consisting of: 19 box cores, eight trawls, and one dredge haul at location 1; 23 box cores and nine trawls at location 2; 18 box cores and eight trawls at location 3; three box cores along a transect between locations 1 and 2; five box cores along a transect between locations 2 and 3; and five trawls collected about 130 km north of location 2. A listing of the depth, latitude, longitude, date, and time (GMT) of each box core sample is

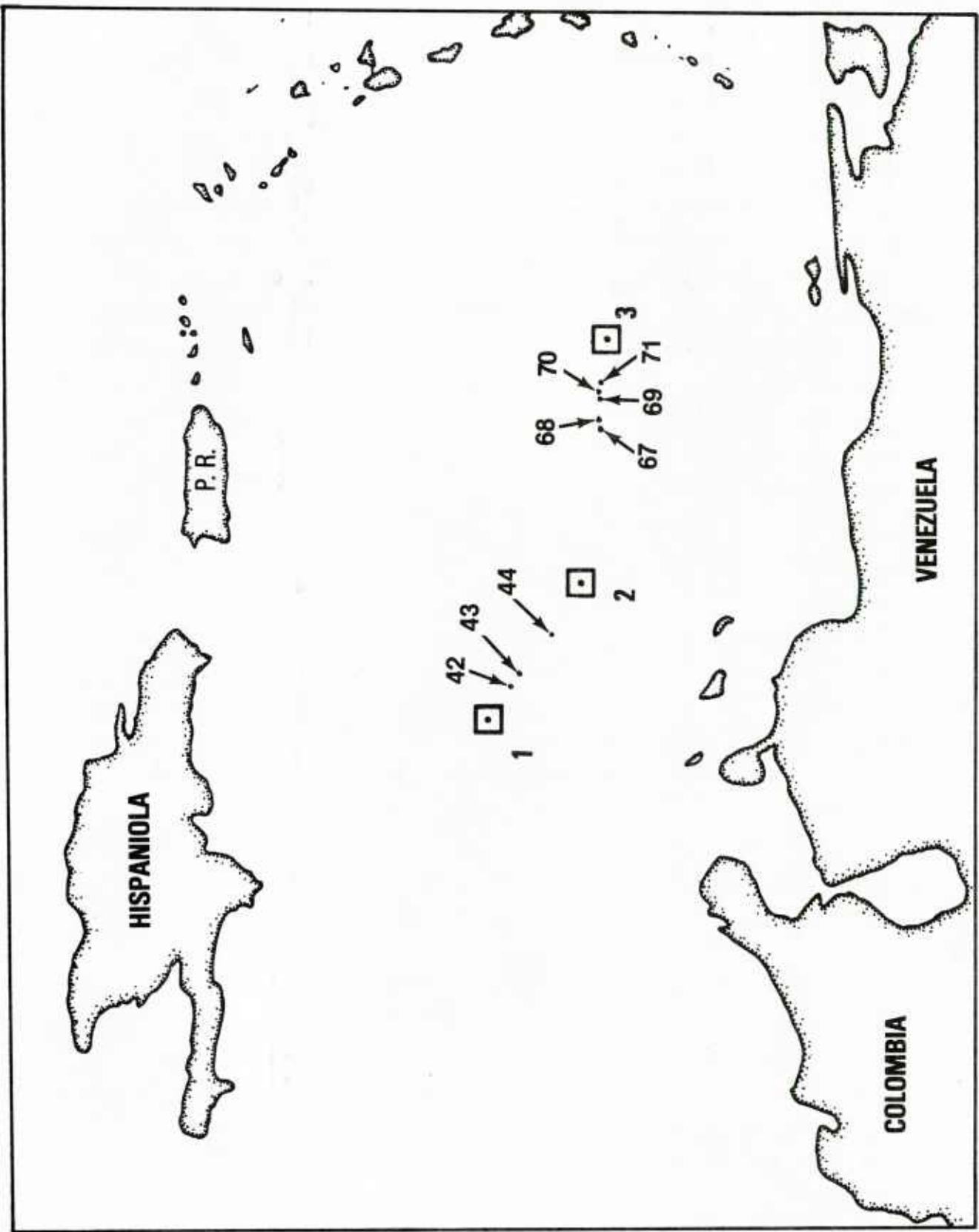


Figure 1. Location of sampling sites in the Venezuela Basin

presented in Table 1. Data pertinent to the trawl and dredge hauls will be presented in subsequent publications.

Samples were collected on three oceanographic cruises. Stations 1-6 were occupied from the R/V GYRE, cruise 79G7, which departed Panama City, Panama, on 10 November 1979 and terminated at Santo Domingo, Dominican Republic, on 26 November 1979. Stations 7-19 were occupied from the USNS LYNCH, cruise 708-80, which departed Roosevelt Roads, Puerto Rico, on 2 July 1980 and returned on 28 July 1980. Stations 20-99 were occupied from the USNS BARTLETT, cruise 1301-82, which departed Roosevelt Roads, Puerto Rico, on 14 October 1981 and returned on 8 December 1981.

#### B. Field Collection

Sediments were collected with the 0.25-m<sup>2</sup> MK III box corer depicted in Figure 2A-D. The design and function of the box corer were essentially the same as the box corer described by Hessler and Jumars (1974) with two exceptions: (1) the safety bar holding the release bolt was triggered by the downward fall of the column through the frame sleeve that released a lever holding the safety bar (this safety acted to prevent accidental triggering of the spade arm on deck or while the box corer was in transit to the bottom), and (2) spring-loaded doors at the top of the core box replaced the screened vents and flapper valves. A pinger, fastened on the wire 25 m from the box corer, was used to monitor sample collection on a Line Scan Recorder. Box core descent was approximately 50 m/min until the sampler was 50 m from the bottom. The box core was then lowered into the bottom as slowly as weather conditions permitted (10-25 m/min). The box core was retrieved at 50-75 m/min.

The box cores containing undisturbed surface sediment with overlying water together with the attached spade arm were carefully removed from the coring device. Cylindrical subcores (6.1-cm inside diameter and 46-cm length) and/or 36 cm (width) x 3 cm (thickness) x 44 cm (length) acrylic subcores were used to collect subsamples of the sediment. Extreme care was exercised to obtain relatively undisturbed subsamples with the sediment-water interface preserved intact within the subcores. In order to obtain undisturbed samples of the pelagic and turbidite layers at location 2, a second set of subcores was taken after manual removal of overlying sediment layers that had high shear strength and resistance to core penetration.

Table 1. Location, depth, date, and time of collection for the 68 box core stations occupied in the Venezuela Basin. Station listings do not include the 30 trawl hauls and dredge haul.

<u>Station</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Date</u>	<u>GMT</u>
1*	3958	15°08.3'N	69°24.6'W	15 Nov 79	0226
2	3958	15°08.3'N	69°24.6'W	15 Nov 79	1018
3	3958	15°14.7'N	69°14.7'W	15 Nov 79	1535
4*	3958	15°08.3'N	69°24.6'W	15 Nov 79	2223
5	3958	15°35.5'N	69°17.3'W	16 Nov 79	0320
6*	3958	15°08.3'N	69°24.6'W	16 Nov 79	1820
7*	5058	13°49.6'N	67°45.0'W	6 Jul 80	0105
8*	5059	13°48.4'N	67°40.7'W	7 Jul 80	1224
9	5054	13°46.6'N	67°45.2'W	8 Jul 80	0001
10*	5056	13°43.7'N	67°43.5'W	8 Jul 80	2103
11#	5060	13°46.0'N	67°49.7'W	23 Jul 80	0345
12#	5060	13°46.7'N	67°46.8'W	23 Jul 80	0842
13#	5060	13°49.4'N	67°42.7'W	23 Jul 80	1516
14	5054	13°50.6'N	67°39.0'W	23 Jul 80	2050
15*	5060	13°45.4'N	67°47.8'W	24 Jul 80	0752
16	5054	13°45.0'N	67°40.4'W	24 Jul 80	1620
17	3517	13°32.8'N	64°45.7'W	25 Jul 80	2150
18	3517	13°25.6'N	64°47.7'W	26 Jul 80	1143
19*	3514	13°25.1'N	64°51.0'W	26 Jul 80	1508
20*	3934	15°05.2'N	69°22.8'W	17 Oct 81	2335
21	3937	15°07.6'N	69°24.1'W	18 Oct 81	2053
22	3934	15°07.3'N	69°22.9'W	19 Oct 81	0241
23	3933	15°07.0'N	69°24.0'W	19 Oct 81	1223
24	3936	15°06.1'N	69°24.2'W	19 Oct 81	1606
25*	3934	15°07.9'N	69°22.7'W	19 Oct 81	2114
26	3940	15°06.4'N	69°22.3'W	21 Oct 81	0902
27*	3935	15°07.9'N	69°20.6'W	21 Oct 81	2342
28	3949	15°07.4'N	69°20.0'W	22 Oct 81	1236
29	3959	15°03.5'N	69°21.6'W	23 Oct 81	0340
30	3945	15°09.0'N	69°34.2'W	23 Oct 81	0845
31	3949	15°04.3'N	69°19.7'W	23 Oct 81	1234
32	3945	15°00.9'N	69°17.8'W	23 Oct 81	1637
42	4322	14°50.8'N	68°59.7'W	29 Oct 81	1659
43	4493	14°45.1'N	68°52.1'W	29 Oct 81	2336
44	4805	14°19.8'N	68°22.2'W	30 Oct 80	0958

\* = macrofauna box core

# = disturbed box core, no subsamples collected

Table 1 (continued)

<u>Station</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Date</u>	<u>GMT</u>
45*	5065	13°53.1'N	67°44.9'W	31 Oct 81	0210
46	5053	13°50.5'N	67°47.7'W	31 Oct 81	2104
47	5049	13°44.4'N	67°48.3'W	1 Nov 81	0305
48	5049	13°44.1'N	67°48.8'W	1 Nov 81	0808
49*	5052	13°37.4'N	67°50.5'W	1 Nov 81	1630
50	5052	13°52.2'N	67°48.3'W	2 Nov 81	0612
51	5049	13°44.9'N	67°48.0'W	2 Nov 81	1226
52*	5052	13°49.5'N	67°50.3'W	2 Nov 81	1825
53	5049	13°47.3'N	67°47.9'W	3 Nov 81	0836
54	5052	13°43.0'N	67°44.8'W	3 Nov 81	1434
55	5050	13°46.4'N	67°47.7'W	3 Nov 81	2149
56*	5049	13°46.6'N	67°47.7'W	4 Nov 81	0741
57	5046	13°42.9'N	67°47.6'W	4 Nov 81	1747
67	4749	13°35.9'N	65°52.1'W	18 Nov 81	0646
68	4447	13°34.0'N	65°45.0'W	18 Nov 81	1429
69	4188	13°34.7'N	65°28.6'W	18 Nov 81	2200
70	3937	13°33.9'N	65°24.2'W	19 Nov 81	0415
71	3775	13°31.6'N	65°10.8'W	19 Nov 81	1057
72*	3476	13°29.6'N	64°45.2'W	20 Nov 81	0522
73	3542	13°33.6'N	64°42.1'W	20 Nov 81	2135
74	3503	13°32.6'N	64°44.0'W	21 Nov 81	0218
75*	3506	13°32.1'N	64°42.5'W	21 Nov 81	0934
76	3490	13°33.8'N	64°41.4'W	21 Nov 81	1934
77	3477	13°28.5'N	64°40.8'W	22 Nov 81	0207
78*	3447	13°32.7'N	64°43.0'W	22 Nov 81	0646
79	3495	13°33.4'N	64°43.3'W	22 Nov 81	2320
80	3429	13°32.3'N	64°32.9'W	23 Nov 81	0415
81*	3437	13°26.2'N	64°38.1'W	23 Nov 81	0921
82	3433	13°35.6'N	64°40.3'W	23 Nov 81	1954
83*	3464	13°23.0'N	64°26.3'W	24 Nov 81	0202
84*	3487	13°28.8'N	64°44.0'W	24 Nov 81	0745
85*	3472	13°30.1'N	64°40.2'W	24 Nov 81	1210
86	3440	13°32.1'N	64°39.6'W	25 Nov 81	0013

\* = macrofauna box core

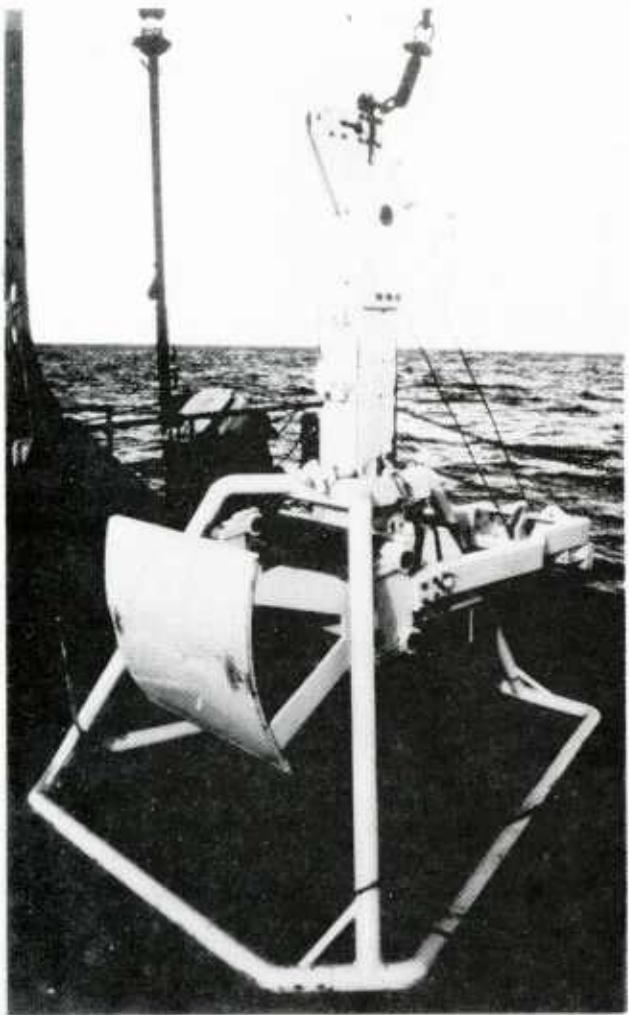


Figure 2A. MK III box corer ready to deploy

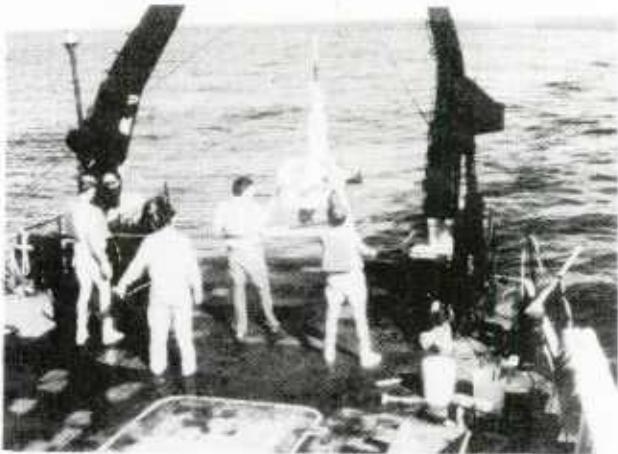


Figure 2B. Deployment of box corer from rear U-frame of USNS BARTLETT

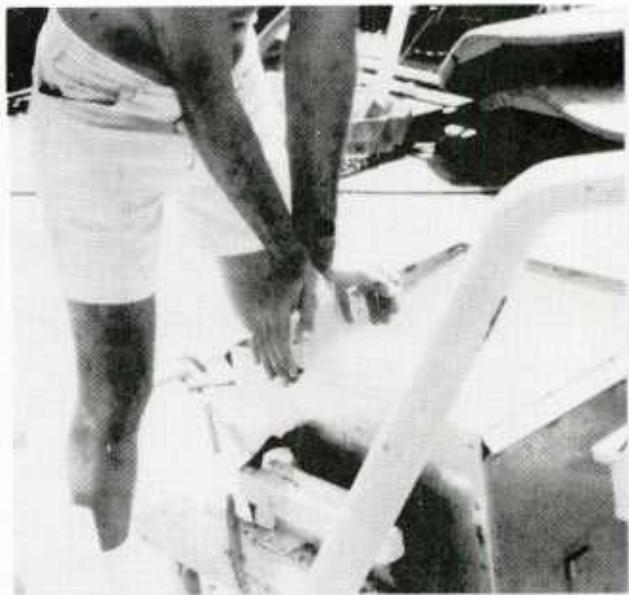


Figure 2D. Subcoreing of box core sample after detachment of box core and spade from box corer with aid of cart



Figure 2C. Retrieval of box corer containing bottom sediment sample

One to 24 subcores were collected from each box core (except from stations 11, 12, and 13 which were disturbed samples). A listing of subcores by type of analysis is presented in Table 2. Some subcores were used for more than one type of analysis (e.g. compressional wave velocity and shear strength). Because of the dual-use of subcores, there will appear to be a disparity between the total number and the sum of the individual subcores. Those collected for analyses by workers outside of NORDA (i.e. benthic foraminifera: Barun Sen Gupta, LSU; meiofauna: Donald Woods, U. of Alabama; muramic acid: David White, FSU; microfaunal lipids: H. Rodger Harvey, U. of Georgia; radionuclide distribution: David Schink and Norman Guinasso, Texas A&M) will be the subject of subsequent publications.

### C. Field Analysis

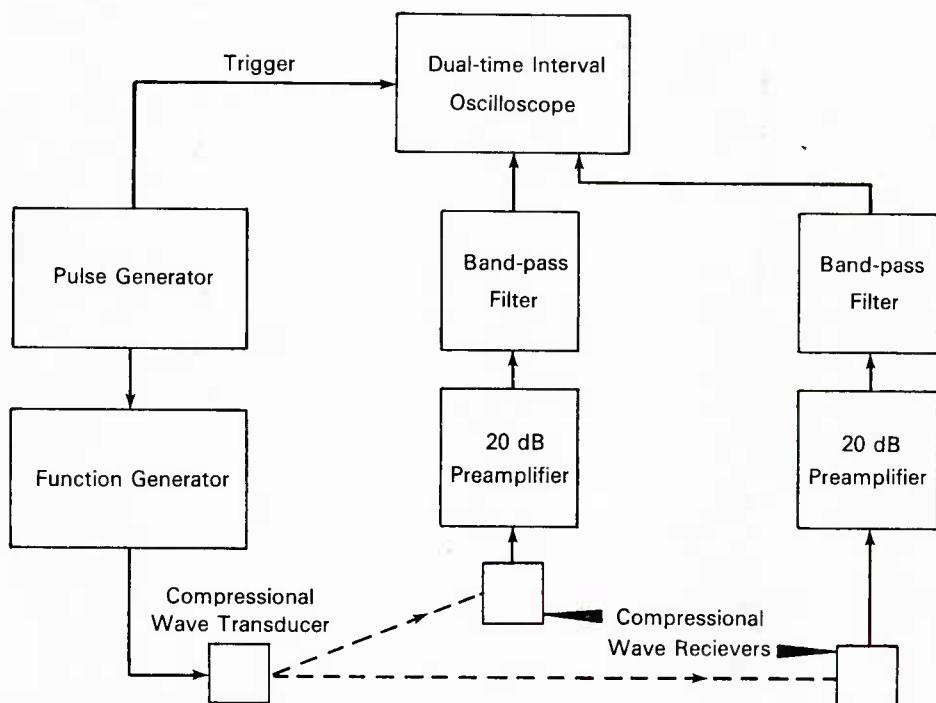
Sediment acoustic measurements were made utilizing three different types of apparatus: probes inserted into undisturbed box cores, USI-103 transducer-receiver head with the USI-103 sediment velocimeter, and USI-103 transducer-receiver head with different electronic components.

Replicate series of compressional wave velocity measurements were made at 0.5-cm intervals in four undisturbed box cores using the probes described in Figures 3 and 4. A Tektronix PG 501 Pulse Generator was used to trigger a Tektronix FG504 Function Generator and a Hewlett Packard 1743A dual-time interval Oscilloscope (Fig. 3). The Tektronix FG504 Function Generator drove the compressional wave transducer with a 70-kHz sine wave triggered for 10  $\mu$  sec duration every 2 msec. The electrical energy was transferred into mechanical energy using a piezoceramic thin sheet transducer (12.7-mm long, 2.5-mm wide, and 0.25-mm thick) cut from a G1195 series thin sheet manufactured by Gulton Industries. The transducer was epoxied at one end into a 15-mm long, 10-mm wide window machined into a 2.4-mm thick Phenolic Sheet and potted with Scotch Cast 8 (Fig. 4).

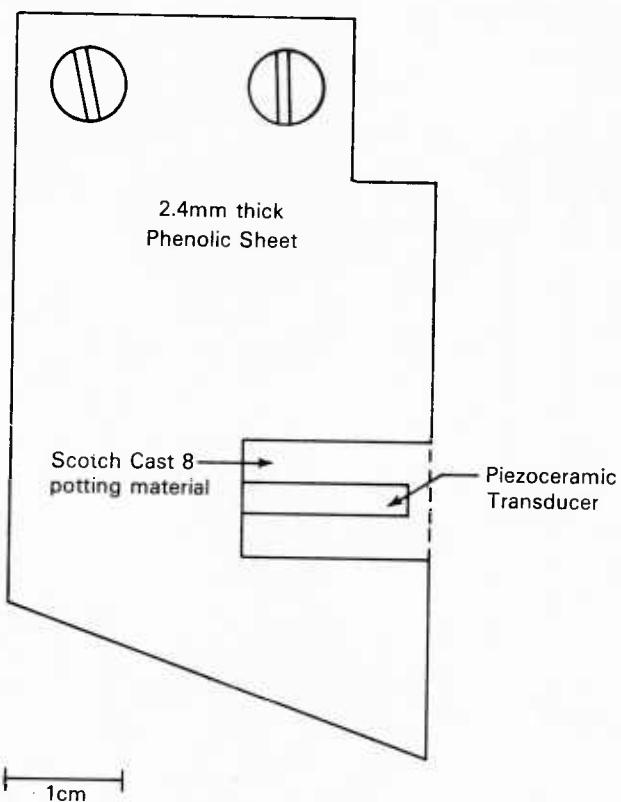
Compressional waves propagated through the sediments to two compressional wave receivers that were built as identically as possible to the compressional wave transducer. The mechanical energy was transferred into electrical energy by the piezoceramic receivers, amplified (20-dB gain) by Burr-Brown 3622K Differential amplifiers, and filtered by Krohn-Hite Model 3100R Band-Pass Filters (1-1000 kHz low cut-off and high cut-off frequencies) set in the maximum flat butterworth

Table 2. Listing of subscores collected from the 45 box core samples obtained for physical/acoustic property analyses

Table 2 (continued)



*Figure 3. Block diagram of compressional wave velocity probe measuring system*



*Figure 4. Line drawing of compressional wave velocity probes*

position. The time delay ( $\Delta t$ ) between the two, amplified, filtered, received signals was measured with the Hewlett-Packard Oscilloscope.

The first " $\Delta t$ " measurement for each series was made in the water overlying the sediment-water interface. The difference in the distance between the transducer and the two receivers was calculated from the " $\Delta t$ " measurement and the compressional wave velocity for sea water (calculated from MacKenzie, 1982) given temperature, salinity, and depth. Temperature and salinity of the overlying water were measured with a YSI Model 43TD temperature probe and an AO Goldberg temperature-compensated, salinity refractometer. The difference in distance between probes was assumed to remain the same during any series of measurements. Time delay ( $\Delta t$ ) measurements were made at 0.5-cm intervals as the probes were inserted into the sediment. Simultaneous sediment temperature measurements were made with a YSI Model 43TD temperature probe. Compressional wave velocity at each depth was calculated from the difference in distance between the transducer and receivers and the measured time delay.

Values of compressional wave velocity were determined for sediment in the cylindrical core liners (stations 9, 14, 16, 17, and 18) with an Underwater Systems, Inc. (Model USI 103) Sediment Velocimeter. Time delay measurements made on distilled water through the core liner were compared to similar time delay measurements on the sediment sample to determine sediment compressional wave velocity using the following formula:

$$V_p = \frac{V_w}{1 - \left[ \frac{\Delta t V_w}{d} \right]} \quad (1)$$

where  $V_p$  is the measured sound velocity through sediment (m/sec);  $V_w$  is the measured sound velocity through distilled water (m/sec);  $\Delta t$  is the measured time arrival of sound through distilled water minus the time arrival through sediment (sec); and  $d$  is the inside diameter of the core in meters.

Values of sediment compressional wave velocity and attenuation were determined at 1-cm intervals in the core samples collected at stations 21-84 with an Underwater System, Inc. (Model USI-103) transducer-receiver head. A Tektronix PG501 Pulse Generator, FG504 Function Generator, Krohn-Hite 3100R Band Pass Filter

and a Hewlett Packard 1743A dual-time interval oscilloscope were substituted for the electronics unit and oscilloscope usually employed with the USI-103 Velocimeter (Fig. 5). These substitutes increased resolution of compressional wave velocity measurements and provided accurate measurement of receiver voltages required for attenuation measurements.

The temperature of the cylindrical subcores was equilibrated with laboratory temperature prior to measurement of compressional wave velocity ( $V_p$ ). Temperature and salinity of the overlying water were measured with a YSI Model 43TD temperature probe and a Guildline Instruments 8400A laboratory salinometer.

Sediment compressional wave velocity was determined using equation 1. All sound velocities were calculated at the common temperature, salinity, and pressure (23°C, 35 ‰, 1 atm) suggested by Hamilton (1971). All measurements taken with the USI-103 transducer-receiver head were made at 400 kHz. Attenuation measurements were calculated as 20 log of the ratio of the received voltage through distilled water versus receiver voltage through sediment. Attenuation measurements were extrapolated to a 1-m path length and reported as dB/m at 400 kHz (Hamilton, 1972). Attenuation was also expressed as a sediment specific constant (k):

$$a = kf^n \quad (2)$$

where  $a$  is the attenuation of compression waves in sediment (dB/m),  $f$  is the transmitted signal frequency (kHz), and  $n$  is a measure of frequency dependence. If  $n$  is assumed to be one (Hamilton, 1972), then the sediment specific constant (k) can be used to compare sediment attenuation to other sediment physical properties such as porosity and mean grain size without regard to the frequency at which the measurements were made.

Sediment shear strength was measured directly by a hand-held vane shear device in undisturbed box core samples and with a Wykeham-Farrance laboratory vane apparatus in cylindrical subcores. The hand-held vane shear device consisted of a 0-24 inch-ounce precision torque gauge equipped with a 1.89-cm high, 1.89-cm diameter or 2.54 x 2.54 cm vane, after the design of Dill and Moore (1965). The Wykeham-Farrance laboratory vane apparatus was equipped with a 1.26-cm high, 1.26-cm diameter vane. The torque required to shear the sediment was measured with both

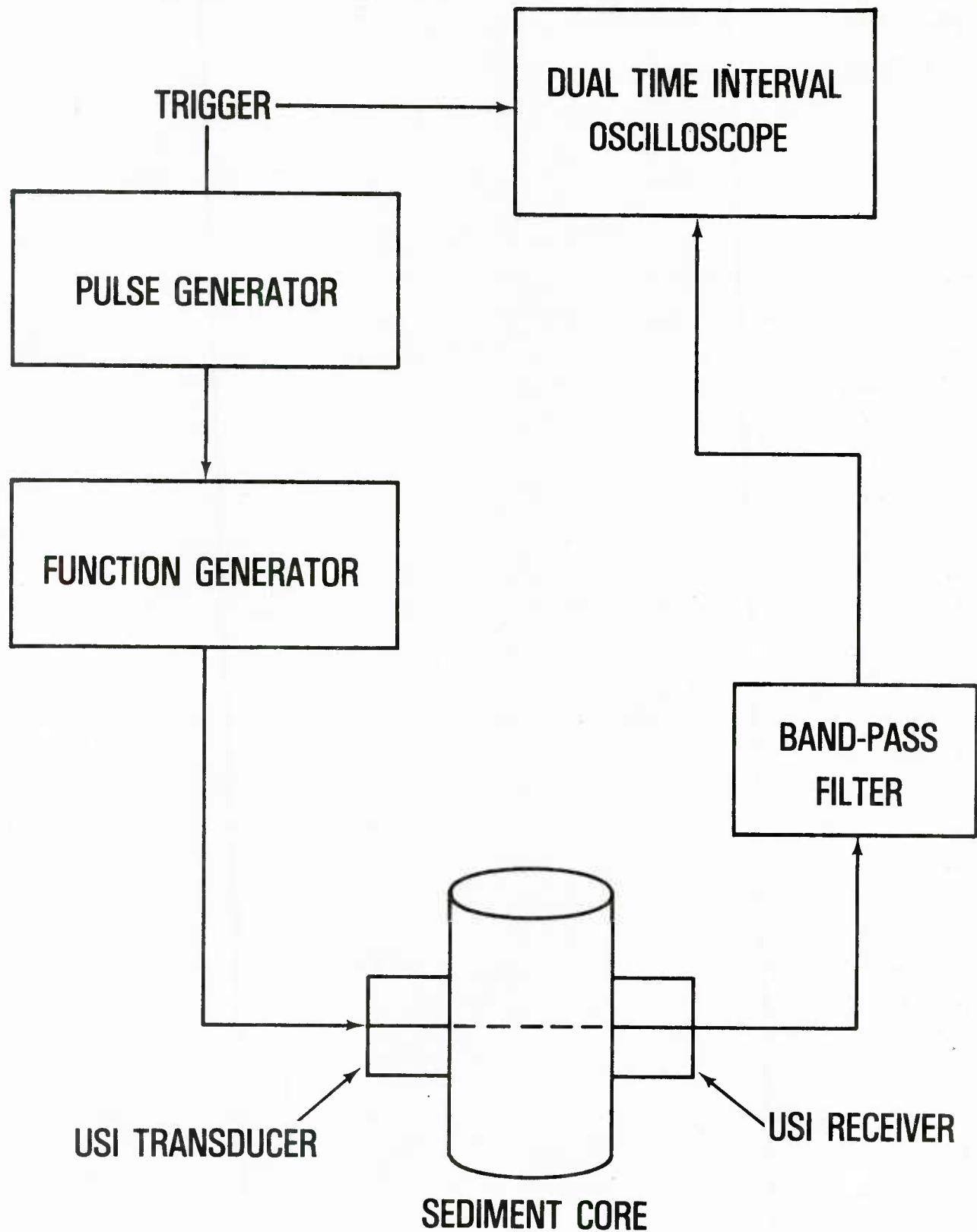


Figure 5. Block diagram of sediment core compressional wave velocity and attenuation measuring system

devices. The rotation rate for the Wykeham-Farrance vane was 84°/min, whereas the hand-held vane was rotated as slowly as possible, approximately 360°/min. Sediment shear strength ( $\tau_f$ ) was calculated from the torque required to shear the sediment (T) and the height (H) and diameter (D) of the vane using the following formula from Monney (1974):

$$\tau_f = \frac{T}{\pi \left( \frac{HD^2}{2} + \frac{D^3}{6} \right)} \quad (3)$$

Hand-held torque measurements were made without regard to the resistance of the vane shaft to rotation in the sediment. Measurements were made every inch after additional insertion of the vane and its 50-cm shaft. Torque measurements made with the Wykeham-Farrance vane do not include the resistance of the vane shaft as part of the measurement. Sediment was extruded from the subcore after each torque measurement exposing fresh undisturbed sediment for the next measurement.

Color descriptions of collected sediment were made with the aid of Munsell® Soil Color Charts (1975). Depth profiles of hue, value, and chroma were determined for sediments after removing a side of the box core. Depth profiles of color were also determined for sediments extruded from subcores after vane shear measurement.

Sedimentary/biological structure was revealed by X-raying sediments collected with acrylic rectangular subcores. Rectangular cores were constructed of two 3-mm thick acrylic sheets (36 x 44 cm) separated by 6-mm thick acrylic sides (3-cm width). One face was sealed with silicone sealant and held together with stainless steel machine screws; the other face was sealed with neoprene and stainless steel machine screws. Two 19-mm diameter holes in the top of the core were used for displacement of air during core insertion. The holes were closed by means of neoprene stoppers after sediment collection. Bottom edges of the cores were beveled to improve penetration. The bottoms of the cores were sealed with rectangular acrylic boxes lined with cellular neoprene. Rubber straps held the bottoms fast to the cores.

The rectangular cores were X-rayed by placing a 35.3 x 42.8 cm sheet of Kodak AA industrial X-ray film on the back of each core and exposing it to 50 kV, 20 ma for 30 sec with a Kramex PX-20N portable X-ray unit (Rhoads et al., 1977). For

safety purposes, cores were X-rayed in a 1.6-cm thick plywood box lined with 1.6-mm thick lead sheeting.

#### D. Laboratory Analysis

All cylindrical core samples not extruded for sediment shear strength measurements were refrigerated or frozen for subsequent laboratory analysis. Refrigerated cores were used in determining sediment porosity, grain size, and percent calcium carbonate ( $\text{CaCO}_3$ ). Organic and nitrogen determinations were made on sediment from frozen cores.

Cores were sectioned at 2-cm intervals by extruding the sediment with a plunger and slicing the exposed sediment off with a spatula. Immediately after sectioning, subsamples of extruded sediment for porosity determinations were placed in preweighed aluminum pans, weighed, dried in an oven at 105°C for 24 hr, cooled in a desiccator, and reweighed. Percent water was calculated by dividing the weight of evaporated water (difference between wet and dried sediment weights) by the weight of the dried solids and multiplying by 100. Using an average grain density value of 2.65 for noncarbonate sediment (location 2) and 2.70 for carbonate sediments (locations 1 and 3), porosity values were determined from tables relating porosity to water content (Lambert and Bennett, 1972). The values were not corrected for the salinity of pore water.

Grain-size analysis of sediment was accomplished essentially as described by Folk (1965). The silt and clay fractions from 4 to 10  $\phi$ (phi), however, were determined with a Micromeritics® Model 5000 Particle Size Analyzer rather than the standard pipette method. The sediment samples were soaked overnight in 200 ml of dispersant solution (2.5 g of sodium hexametaphosphate per liter of distilled water), then disaggregated by sonicating the sample with a cell disruptor for 12 min while stirring with a magnetic stirrer. The disaggregated sample was wet-sieved with dispersant through a 62- $\mu\text{m}$  screen to separate the sand-sized fraction from the silt- and clay-sized fraction. The finer fraction was collected in a 1000-ml graduated cylinder, and enough dispersant was added to fill the graduated cylinder to 1000 ml. The coarser fraction was rinsed off the screen into a beaker with distilled water and then dried.

The dried, coarser fraction was fractionated into -3 to -2, -2 to -1, -1 to 0, 0 to 1, 1 to 2, 2 to 3, and 3 to 4  $\phi$  intervals with an ATM sonic sifter and each fraction was individually weighed to determine the sand-sized particle distribution. The silt- and clay-sized fraction was thoroughly agitated by vigorous stirring and aeration. A 20-ml aliquot sample representative of the total distribution of particles in suspension was pipetted from the graduated cylinder and into a preweighed beaker, dried in an oven, and weighed. After 5 days, 20-ml aliquot samples were pipetted from the appropriate depths in the graduated cylinder and into preweighed beakers, dried, and weighed to estimate the weight of clay-sized particles in the 10 to 11, 11 to 12, and 12 to 14  $\phi$  intervals. At the conclusion of six days of settling, all particles 10  $\phi$  and coarser were near the bottom of the graduated cylinder. At this time the supernatant was slowly siphoned into another graduated cylinder, leaving the settled particles and about 200 ml of dispersant. The supernatant volume was recorded. A 20-ml aliquot sample was pipetted from the supernatant after agitation, dried, and weighed to estimate the weight of the particles finer than 10  $\phi$ . Finally, the sample remaining in the graduated cylinder was sonicated and stirred for 12 minutes in a beaker prior to size determination with the Micromeritics® analyzer. This particle size analyzer determines the concentration of silt- and clay-sized particles in liquid suspension at various depths in a sample cell by means of a finely-collimated, horizontal X-ray beam. The concentration was presented in the form of a cumulative "percent-finer-than" distribution trace in relation to the Stokesian diameter of the particles.

Sediment grain size distributions were analyzed with an HP 9825A desktop computer and plotted with an HP 9862A plotter (unpublished program is available on request from MDR). Data were plotted as weight percent histograms and cumulative weight percent for all phi-sizes through 14  $\phi$ . The fraction finer than 12  $\phi$  was equally divided between the 12 to 13  $\phi$  and 13 to 14  $\phi$  intervals. Percentages of gravel (< -1.0  $\phi$ ), sand (-1.0 to 4.0  $\phi$ ), silt (4.0 to 8.0  $\phi$ ), and clay (> 8.0  $\phi$ ) were tabulated. The mean phi, standard deviation, skewness, kurtosis, and normalized kurtosis were calculated according to the graphic formula of Folk and Ward (1957).

Percent  $\text{CaCO}_3$  analysis was accomplished with a gasometric apparatus based on the design of Hulsemann (1966). Sediment subsamples were dried at 105°C for 24 hr,

ground in a mortar and pestle, and stored in a desiccator prior to analysis. A weighed portion (200-500 mg dry weight) of the subsample was added directly to a flask from the weighing paper, and the amount of sediment adhering to the paper was subtracted to obtain the exact weight. A magnetic stir bar was added to the flask, and the flask was attached to the apparatus by means of a silicone-greased, ground-glass connection and secured with a joint clamp. Next, a side arm with 5 ml of 4N hydrochloric acid (HCl) was attached in the same manner to the apparatus above the sample flask, and the system was closed off from atmospheric pressure by means of a three-way stopcock. Negative pressure in the system was created by lowering an open flask of mercury connected to a 100-ml burette. After the side arm containing the acid was rotated emptying its contents into the sample flask, the acidified sample was mixed with a magnet and heated with a Bunsen burner until the liquid bubbled up the sides of the flask. The system was allowed to come to thermal equilibrium with laboratory temperature before the mercury manometer was adjusted and the reading recorded. Barometric pressure was noted and recorded before and after each sample run. Two  $\text{CaCO}_3$  standards were run at the beginning of the day to test for leaks in the system.

The volume of gas ( $\text{CO}_2$ ) released was corrected to standard temperature and pressure and converted to carbonate as  $\text{CaCO}_3$  by means of the formula:

$$\frac{VP}{TW} \times 0.1605 = \% \text{ CaCO}_3 \quad (4)$$

where V = observed volume of  $\text{CO}_2$ , P = corrected pressure, T = room temperature ( $^{\circ}\text{K}$ ), and W = weight of the sample in grams. Gas pressure was corrected for barometric pressure, water vapor pressure, and temperature. Duplicates from each depth in the core were analyzed. If values of duplicates differed by more than 2%, another replicate was run.

Frozen sediment cores for organic carbon and nitrogen analysis were thawed before extruding and sectioning at 2-cm intervals. Care in sectioning and sampling the core was exercised so that organic contamination (e.g. plastic core liner) was not introduced. The samples of the cores were refrozen and stored until analysis at a later date.

Thawed sediment samples were added to preweighed, precombusted (475°C) beakers and dried at 90°C for 24 hr. After cooling in a desiccator the samples were reweighed and ground to a fine powder in a clean mortar and pestle. Calcium carbonate was removed from the samples by adding excess (approx. 110%) 4N HCl. The amount of acid added was determined a priori from percent CaCO<sub>3</sub> analysis of separate sediment cores. After 12 hr, the acidified samples were brought to seawater pH (8.2) by adding 8N sodium hydroxide (NaOH). A Corning Model 125 pH meter with a calomel reference electrode (ceramic-type junction) was used to monitor pH. Samples were dried at 90°C for 24-36 hr, cooled in a desiccator, then weighed to determine the reacted weight. Finally, the dried samples were ground in a clean mortar and pestle, added to clean vials, sealed, and weighed.

Immediately before weighing a subsample of finely-ground sediment for analysis, the vial was weighed again to correct for absorbed water. Any additional weight due to water absorption was added to the reacted weight value. The subsample (20,000-45,000 µg) was weighed in a precombusted (475°C) aluminum boat and loaded into a Perkin-Elmer Model 240 CHN analyzer for determination of organic carbon and nitrogen. Duplicates from each depth in the core were analyzed. Additional replicates were run if values of duplicates differed by more than 2%.

### III. RESULTS

The bulk of data in this report is presented in five appendices. Appendix A contains data on the following sediment acoustic and physical properties: compressional wave velocity ( $V_p$ ), compressional wave velocity ratio ( $V_p$  ratio), compressional wave attenuation (k), porosity, percent calcium carbonate (CaCO<sub>3</sub>), percent organic carbon (C), percent organic nitrogen (N), shear strength, percent sand, percent silt, percent clay, mean  $\phi$  (phi), standard deviation, skewness, kurtosis and normalized kurtosis. Sample designator consists of station number followed by subcore number (e.g. 3-4 designates the fourth subcore collected at station 3).

Appendix B contains frequency histograms of grain size distribution data. Grain size data were plotted as weight percent histograms and cumulative weight curves for phi sizes -4 through 14. Also included are percentage gravel, sand,

silt, and clay and mean phi, standard deviation, skewness, kurtosis, and normalized kurtosis.

X-radiographs of sediments collected with the 36 x 44. x 3 cm rectangular subcores are presented in Appendix C. X-radiographs depict sedimentary/biological structure from eight stations and include X-radiographs from all three locations. Images are "positives" produced from the developed X-ray transparency, and thus darker areas of the X-radiograph denote areas of greater sediment density.

Color descriptions of sediments are presented in Appendix D. Color descriptions are depicted as both Munsell® hue/value/chroma designations and soil color names. The "hue" refers to red, yellow, green, blue, and purple. The "value" refers to lightness. The "chroma" refers to strength (departure from a neutral of the same lightness). All descriptions are for sediments collected with subcores except at station 31 where the color was described from a freshly opened box core.

Compressional wave velocity probe measurements are presented in Appendix E.

Appendix F contains sediment shear strength values measured with the hand-held vane shear device.

#### IV. REFERENCES

Dill, R.F. and D.G. Moore (1965). A diver-held vane-shear apparatus. Mar. Geol., 3:323-327.

Folk, R.L. (1965). Petrology of sedimentary rocks. Hemphill's, Austin, Texas.

Folk, R.L. and W.C. Ward (1957). Brazos River Bar, a study in the significance of grain size parameters. J. Sed. Pet., 27:3-26.

Hamilton, E.L. (1971). Elastic properties of marine sediments. J. Geophys. Res., 76:579-603.

Hamilton, E.L. (1972). Compressional wave attenuation in marine sediments. Geophysics, 37:620-645.

Hessler, R.R. and P.A. Jumars (1974). Abyssal community analysis from replicate box core in the central North Pacific. Deep Sea Res., 21:185-209.

Hulsemann, J. (1966). On the routine analysis of carbonates in unconsolidated sediments. J. Sediment Petrol., 36:622-625.

Lambert, D.N. and R.H. Bennett (1972). Tables for determining porosity of deep-sea sediments from water content and average grain density measurements. NOAA Technical Memo. ERL/AOML-17.

MacKenzie, K.V. (1981). Nine-term equation for sound speed in the oceans. J. Acoust. Soc. Am., 70:807-812.

Monney, N.T. (1974). An analysis of the vane shear test at varying rates of shear. In: A.L. Inderbitzen (Ed.), Deep-Sea Sediments: Physical and Mechanical Properties. Plenum Press, New York, pp. 151-167.

Munsell Soil Color Charts (1975). Munsell Color, Baltimore, Maryland.

Rhoads, D.C., R.C. Aller and M.B. Goldhaber (1977). The influence of colonizing benthos on physical properties and chemical diagenesis of the estuarine sea floor. In: B.C. Coull (Ed.), Ecology of Marine Benthos. Univ. of South Carolina Press, Columbia, South Carolina, pp. 113-138.

APPENDIX A  
SEDIMENT ACOUSTIC AND PHYSICAL PROPERTY DATA  
FROM BOX CORES COLLECTED IN THE VENEZUELA BASIN

Compressional wave velocity ( $V_p$ , m/sec), compressional wave velocity ratio ( $V_p$  ratio), attenuation (k), porosity (%), percent calcium carbonate ( $\text{CaCO}_3$ ), percent organic carbon (C), percent organic nitrogen (N), shear strength ( $\text{g/cm}^2$ ), percent sand, percent silt, percent clay, mean  $\phi$  (phi), standard deviation, skewness, kurtosis and normalized kurtosis for sediments collected with cylindrical subcores from box cores in the Venezuela Basin are presented. Sample designator consists of station number followed by subcore number (e.g. 3-4 designates the fourth subcore collected at station 3).

Cruise: GYL 79G-7 Sample: 3-4  
Position: 15-14N 765-14W Deg-C 35.00 o/oo  
Calculated for: 25.0

Date: 11/15/79  
Depth: 3958m  
0 m 400 kHz

Depth (cm)	V <sub>k</sub> m/sec	V <sub>k</sub> k <sup>2</sup>	Attr. %	K <sub>1</sub> For.	K <sub>2</sub> CaCC3	% C	Shear K	% Str.	% Sanc.	% Silt	% Clay	Mear. pm1	Dev	Skew	Kurt	N. Kurt
0.0																
1.0																
2.0																
3.0																
4.0																
5.0																
6.0																
7.0																
8.0																
9.0																
10.0																
11.0																
12.0																
13.0																
14.0																
15.0																
16.0																
17.0																
18.0																
19.0																
20.0																
21.0																
22.0																
23.0																
24.0																
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26.0																
27.0																
28.0																
29.0																
30.0																
31.0																
32.0																
33.0																
34.0																
35.0																
36.0																
37.0																

Cruise: GYRE 79G-7 Sample: 3-5 Date: 11/15/79  
Position: 15-14N; 69-14W Depth: 3958m  
Calculatedator: 23.0 Deg-C 35.00 o/oo 0 m 400 kHz

Cruise: GYRE 79G-7      Sample: 3-6  
 Position: 15-14N; 69-14W      Date: 11/15/79  
 Calculated for: 23.0 Deg-C      Depth: 3958m  
 0 m 400 kHz

Depth (cm)	VP m/sec	VE Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1532.8	1.002														
1.0	1489.5	0.974														
2.0	1489.5	0.974														
3.0	1489.5	0.974														
4.0	1489.5	0.974														
5.0	1489.5	0.974														
6.0	1489.5	0.974														
7.0	1489.5	0.974														
8.0	1489.5	0.974														
9.0	1489.5	0.974														
10.0	1493.3	0.976														
11.0	1493.3	0.976														
12.0	1493.3	0.976														
13.0	1493.3	0.976														
14.0	1489.5	0.974														
15.0	1493.3	0.976														
16.0	1489.5	0.974														
17.0	1489.5	0.974														
18.0	1489.5	0.974														
19.0	1485.6	0.971														
20.0	1485.6	0.971														
21.0	1478.1	0.969														
22.0	1481.8	0.969														
23.0	1478.1	0.966														
24.0	1478.1	0.966														
25.0	1478.1	0.966														
26.0	1478.1	0.966														
27.0	1478.1	0.966														
28.0	1478.1	0.966														
29.0	1478.1	0.966														
30.0	1478.1	0.966														
31.0	1481.8	0.969														

Cruise: GYRE 79G-7      Sample: 3-7  
 Position: 15-14N; 69-14W      Date: 11/15/79  
 Calculated for: 23.0 Deg-C      Depth: 3958m  
                                       0 m 400 kHz

Berth (cm)	V <sub>P</sub> m/sec	V <sub>S</sub> m/sec	Attr. Ratio	% Por.	CaCC3	% C	% A Str.	% Shear A	% Silt	% Sand	mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1543.0	1.009													
1.0	1491.4	0.975													
2.0	1491.4	0.975													
3.0	1495.2	0.978													
4.0	1495.2	0.978													
5.0	1495.2	0.978													
6.0	1495.2	0.978													
7.0	1495.2	0.978													
8.0	1495.2	0.978													
9.0	1495.2	0.978													
10.0	1495.2	0.978													
11.0	1495.2	0.978													
12.0	1495.2	0.978													
13.0	1495.2	0.978													
14.0	1495.2	0.978													
15.0	1495.2	0.978													
16.0	1495.2	0.978													
17.0	1495.2	0.978													
18.0	1491.4	0.975													
19.0	1487.5	0.973													
20.0	1487.5	0.973													
21.0	1483.7	0.970													
22.0	1483.7	0.970													
23.0	1483.7	0.970													
24.0	1479.9	0.968													
25.0	1479.9	0.968													
26.0	1479.9	0.968													
27.0	1479.9	0.968													
28.0	1479.9	0.968													
29.0	1479.9	0.968													
30.0	1479.9	0.968													
31.0	1479.9	0.968													

Cruise: GYRE 79c-7 Sample: 3-8  
 Position: 15-14N, 65-14W Date: 11/15/79  
 Calculated tor: 23.0 Deg-C Depth: 3958m  
 0 m 400 kHz

Depth (cm.)	$v_F$ m/sec	$k_{Attn.}$	$\frac{g}{\rho}$	$\frac{g}{\rho}$	$\frac{g}{\rho}$	Shear Str.	$\frac{\%}{\rho}$	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1534.8	1.004										
1.0	1495.2	0.978										
2.0	1491.4	0.975										
3.0	1491.4	0.975										
4.0	1495.2	0.978										
5.0	1495.2	0.978										
6.0	1495.2	0.978										
7.0	1495.2	0.978										
8.0	1495.2	0.978										
9.0	1495.2	0.978										
10.0	1495.2	0.978										
11.0	1495.2	0.978										
12.0	1495.2	0.978										
13.0	1495.2	0.978										
14.0	1495.2	0.978										
15.0	1495.2	0.978										
16.0	1491.4	0.975										
17.0	1491.4	0.975										
18.0	1487.5	0.973										
19.0	1487.5	0.973										
20.0	1487.5	0.973										
21.0	1483.7	0.970										
22.0	1483.7	0.970										
23.0	1479.9	0.968										
24.0	1479.9	0.968										
25.0	1479.9	0.968										
26.0	1483.7	0.970										
27.0	1483.7	0.970										
28.0	1479.9	0.968										
29.0	1479.9	0.968										
30.0	1483.7	0.970										

Cruise: GYKE 79G-7      Sample: 3-9  
 Position: 15-14N; 69-14W  
 Calculated for: 23.0 Deg-C      35.00 a/cos

Depth (cm.)	V <sub>F</sub> m/sec	V <sub>F</sub> Ratio	Attn. k	% Por.	% Cacc3	% C	% N	% Shear	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1530.6	1.001														
1.0	1506.9	0.985														77.7
2.0	1499.1	0.980														
3.0	1491.4	0.975														76.4
4.0	1483.7	0.970														
5.0	1483.7	0.970														75.1
6.0	1491.4	0.975														
7.0	1491.4	0.975														74.0
8.0	1499.1	0.980														
9.0	1499.1	0.980														
10.0	1499.1	0.980														
11.0	1499.1	0.980														72.1
12.0	1499.1	0.980														
13.0	1499.1	0.980														70.8
14.0	1499.1	0.980														
15.0	1499.1	0.980														
16.0	1499.1	0.980														70.8
17.0	1499.1	0.980														71.3
18.0	1491.4	0.975														
19.0	1491.4	0.975														
20.0	1491.4	0.975														
21.0	1463.7	0.970														
22.0	1463.7	0.970														
23.0	1463.7	0.970														
24.0	1463.7	0.970														
25.0	1483.7	0.970														
26.0	1483.7	0.970														
27.0	1463.7	0.970														74.0
28.0	1463.7	0.970														
29.0	1463.7	0.970														
30.0	1463.7	0.970														
31.0																
32.0																
33.0																
34.0																
35.0																
36.0																
37.0																

Cruise: GYKE 79C-7 Sample: 3-10 Date: 11/15/79  
 Position: 15-14N; 65-14W Depth: 3958m.  
 Calculated IOR: 23.0 Deg-C 35.00 c/oo 0 m. 400 kHz

Deftn (cm.)	V <sub>E</sub> n/sec	V <sub>E</sub> katic n/sec	Atttn. K	% For.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1503.2	0.983														
1.0	1495.4	0.978														
2.0	1495.4	0.978														
3.0	1495.4	0.978														
4.0	1495.4	0.978														
5.0	1495.4	0.978														
6.0	1495.4	0.978														
7.0	1495.4	0.978														
8.0	1495.4	0.978														
9.0	1495.4	0.978														
10.0	1495.4	0.978														
11.0	1495.4	0.978														
12.0	1495.4	0.978														
13.0	1495.4	0.978														
14.0	1495.4	0.978														
15.0	1495.4	0.978														
16.0	1495.4	0.978														
17.0	1491.5	0.975														
18.0	1491.5	0.975														
19.0	1487.7	0.973														
20.0	1487.7	0.973														
21.0	1487.7	0.973														
22.0	1483.9	0.970														
23.0	1483.9	0.970														
24.0	1483.9	0.970														
25.0	1483.9	0.970														
26.0	1483.9	0.970														
27.0	1483.9	0.970														
28.0	1483.9	0.970														
29.0	1483.9	0.970														
30.0	1483.9	0.970														
31.0																
32.0																
33.0																
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146.0																
147.0					</											

Cruise:		GYRE 79G-7		Sample:		5-1		Date: 11/16/79						
Position:		15-14N; 69-14W						Depth: 3958m						
Calculated for:		23.0 Deg-C		35.00 o/oo				0 m 400 kHz						
Depth (Ch.)	v <sub>F</sub> m/sec	v <sub>F</sub> knots	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Silt	Mean phi	Dev phi	Skew	Kurt	N. Kurt
1.0	1503.0	0.983												
2.0	1495.2	0.976												
3.0	1495.2	0.978												
4.0	1495.2	0.976												
5.0	1495.2	0.976												
6.0	1495.2	0.978												
7.0	1495.2	0.978												
8.0	1495.2	0.976												
9.0	1495.2	0.978												
10.0	1495.2	0.976												
11.0	1495.2	0.976												
12.0	1495.2	0.976												
13.0	1495.2	0.976												
14.0	1495.2	0.976												
15.0	1495.2	0.976												
16.0	1495.2	0.978												
17.0	1495.2	0.976												
18.0	1491.4	0.975												
19.0	1467.5	0.973												
20.0	1467.5	0.973												
21.0	1483.7	0.970												
22.0	1483.7	0.970												
23.0	1479.5	0.968												
24.0	1479.5	0.966												
25.0	1475.9	0.968												
26.0	1479.5	0.968												
27.0	1479.5	0.968												
28.0	1479.9	0.966												
29.0	1479.9	0.968												
30.0	1479.5	0.966												
31.0	1483.7	0.970												

Cruise: GYRE 7G-7 Sample: 5-2 Date: 11/16/79  
 Position: 15-13N; 69-17W Depth: 3958m  
 Calculated for: 23.0 Deg-C 0 m 400 kHz

5-2

Cruise: GYKE 79G-7      Sample: 5-4  
 Position: 15°13'N; 69°17'W      Date: 11/16/79  
 Calculated Ior: 23.0      Deg-C: 35.00      O/oo  
 0 m      400 kHz

Depth (cm)	Vp m/sec	Vf Katic n.	Attr. K	% Fcr.	% Cacc.3	% C	% A	Shear Str.	% Sano	Silt Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1459.1	0.980		75.3	66.14				50.95	9.35	39.70	5.43	4.52	0.47	0.59
1.0	1495.2	0.978		76.0	65.50				50.50	10.05	39.45	5.32	4.46	0.44	0.58
2.0	1495.2	0.978		74.8	63.39				49.38	10.49	40.14	5.64	4.44	0.33	0.60
3.0	1495.2	0.978		73.7	65.66				46.63	11.90	41.48	6.02	4.43	0.17	0.59
4.0	1495.2	0.978		73.5	65.14				47.16	13.36	39.48	5.81	4.40	0.21	0.59
5.0	1495.2	0.978		73.0	65.79				41.65	16.58	41.77	6.33	4.41	0.04	0.59
6.0	1495.2	0.978		71.7	65.48				37.64	16.40	45.96	6.71	4.42	-0.05	0.60
7.0	1491.4	0.975		71.5	65.48				38.62	16.31	45.02	6.54	4.44	-0.02	0.60
8.0	1491.4	0.975		70.9	63.69				37.88	15.61	46.51	6.69	4.43	-0.07	0.59
9.0	1491.4	0.975		71.2	64.86				33.76	17.72	48.52	7.00	4.39	-0.15	0.62
10.0	1491.4	0.975		72.3	69.89				29.19	20.05	50.70	7.28	4.33	-0.21	0.67
11.0	1491.4	0.975		72.7	69.90				27.55	20.64	51.82	7.41	4.19	-0.24	0.69
12.0	1491.4	0.975		73.1	73.52				31.90	20.67	47.23	7.04	4.24	-0.09	0.66
13.0	1491.4	0.975		73.6	76.77				31.11	20.59	48.25	7.07	4.13	-0.14	0.67
14.0	1491.4	0.975		74.0	79.52				28.39	20.05	51.56	7.35	4.11	-0.23	0.69
15.0	1491.4	0.975		74.4	82.52				28.0	19.75	52.52	7.62	4.08	-0.18	0.71
16.0	1487.5	0.973		74.8	85.52				27.40	19.45	53.52	7.82	4.05	-0.15	0.72
17.0	1487.5	0.973		75.2	88.52				26.70	19.15	54.52	8.02	3.98	-0.12	0.73
18.0	1487.5	0.973		75.6	91.52				26.00	18.85	55.52	8.22	3.95	-0.09	0.74
19.0	1487.5	0.973		76.0	94.52				25.30	18.55	56.52	8.42	3.92	-0.06	0.75
20.0	1487.5	0.973		76.4	97.52				24.60	18.25	57.52	8.62	3.89	-0.03	0.76
21.0	1483.7	0.970		76.8	100.52				23.90	17.95	58.52	8.82	3.86	-0.00	0.77
22.0	1479.9	0.968		77.2	103.52				23.20	17.65	59.52	9.02	3.83	0.03	0.78
23.0	1479.9	0.968		77.6	106.52				22.50	17.35	60.52	9.22	3.80	0.06	0.79
24.0	1479.9	0.968		78.0	109.52				21.80	17.05	61.52	9.42	3.77	0.09	0.80
25.0	1479.9	0.968		78.4	112.52				21.10	16.75	62.52	9.62	3.74	0.12	0.81
26.0	1479.9	0.968		78.8	115.52				20.40	16.45	63.52	9.82	3.71	0.15	0.82
27.0	1479.9	0.968		79.2	118.52				19.70	16.15	64.52	10.02	3.68	0.18	0.83
28.0	1479.9	0.968		79.6	121.52				19.00	15.85	65.52	10.22	3.65	0.21	0.84
29.0	1479.9	0.968		80.0	124.52				18.30	15.55	66.52	10.42	3.62	0.24	0.85
30.0	1479.9	0.968		80.4	127.52				17.60	15.25	67.52	10.62	3.59	0.27	0.86
31.0	1479.9	0.968		80.8	130.52				16.90	14.95	68.52	10.82	3.56	0.30	0.87
32.0	1479.9	0.968		81.2	133.52				16.20	14.65	69.52	11.02	3.53	0.33	0.88

Depth (cm)	Vp m/sec	Vs m/sec	Katic	Attenuation			Shear Modulus G dyn/cm²	Str. N	Sarc.	Silt	Clay	Mean phi	Dev	Skew	Kurt	N.	Kurt
				% Kcr.	% Cacc3	% C											
0.0	1465.0	6.958															
1.0	1499.1	0.980															
2.0	1491.4	0.975															
3.0	1491.4	0.975															
4.0	1491.4	0.975															
5.0	1491.4	0.975															
6.0	1491.4	0.975															
7.0	1495.2	0.978															
8.0	1491.4	0.975															
9.0	1491.4	0.975															
10.0	1491.4	0.975															
11.0	1491.4	0.975															
12.0	1495.2	0.978															
13.0	1495.2	0.978															
14.0	1495.2	0.978															
15.0	1495.2	0.978															
16.0	1491.4	0.975															
17.0	1491.4	0.975															
18.0	1491.4	0.975															
19.0	1487.5	0.973															
20.0	1487.5	0.973															
21.0	1487.5	0.973															
22.0	1483.7	0.970															
23.0	1483.7	0.970															
24.0	1483.7	0.970															
25.0	1483.7	0.970															
26.0	1483.7	0.970															
27.0	1479.9	0.968															
28.0	1479.9	0.968															
29.0	1479.9	0.968															
30.0	1479.9	0.968															
31.0	1479.9	0.968															
32.0	1483.7	0.970															

Cruise: GYRE 79G-7 Sample: 5-6 Date: 11/16/79  
 Position: 15-13N; 65-17W Depth: 3958m  
 Calculated for: 23.0 Deg-C 0 m 400 fms

Cruise: GYKE 79G-7 Position: 15-13N; 65-17W  
Calculated tor: 23.0 deg-C

Date: 11/16/79  
Depth: 3956m  
0 m 400 kHz

Sample: 5-7  
35.00 o/oo

Depth (cm)	v <sub>F</sub> m/sec	Attn. K	% Fcor.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	N. Kurt
1.0															
2.0															
3.0															
4.0															
5.0															
6.0															
7.0															
8.0															
9.0															
10.0															
11.0															
12.0															
13.0															
14.0															
15.0															
16.0															
17.0															
18.0															
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30.0															
31.0															
32.0															
33.0															
34.0															
35.0															
36.0															
37.0															
38.0															
39.0															
40.0															
41.0															

Depth (cm)	Cruise: CYRE 79G-7			Sample: 5-14			Date: 11/16/79								
	Position: 15-13N; 69-17W	Calculated for: 23.0	Deg-C	35.00	O/oo	N	Depth: 0 m	400 kHz	N.	Kurt					
	Vp m/sec	Vf m/sec	Ratio	Attn. k	% Por.	CaCO3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew
0.0	1526.7	0.998													
1.0	1495.2	0.978													
2.0	1491.4	0.975													
3.0	1491.4	0.975													
4.0	1491.4	0.975													
5.0	1491.4	0.975													
6.0	1491.4	0.975													
7.0	1491.4	0.975													
8.0	1491.4	0.975													
9.0	1491.4	0.975													
10.0	1491.4	0.975													
11.0	1491.4	0.975													
12.0	1495.2	0.978													
13.0	1495.2	0.978													
14.0	1495.2	0.978													
15.0	1495.2	0.978													
16.0	1487.5	0.973													
17.0	1487.5	0.973													
18.0	1487.5	0.973													
19.0	1483.7	0.970													
20.0	1483.7	0.970													
21.0	1479.9	0.968													
22.0	1479.9	0.968													
23.0	1479.9	0.968													
24.0	1479.9	0.968													
25.0	1479.9	0.968													
26.0	1479.9	0.968													
27.0	1479.9	0.968													
28.0	1479.9	0.968													
29.0	1479.9	0.968													
30.0	1479.9	0.968													
31.0	1479.9	0.968													

Depth (cm)	VP m/sec	Attn. Ratio	K	% Por.			% CaCO <sub>3</sub>			% N			% Str.			% Sand			% Silt			% Clay			Mean Phi			Dev			Skew			Kurt																																																	
				VP	Attn.	Ratio	% Por.	% CaCO <sub>3</sub>	% N	% Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N.	Kurt																																																																
0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
1.0	1491.4	0.975	3.0	1483.7	0.970	4.0	1483.7	0.970	5.0	1479.9	0.968	6.0	1479.9	0.968	7.0	1479.9	0.968	8.0	1479.9	0.968	9.0	1479.9	0.968	10.0	1479.9	0.968	11.0	1479.9	0.968	12.0	1479.9	0.968	13.0	1487.5	0.973	14.0	1491.4	0.975	15.0	1499.1	0.980	16.0	1499.1	0.980	17.0	1487.5	0.973	18.0	1491.4	0.975	19.0	1510.8	0.988	20.0	1510.8	0.988	21.0	1530.8	1.001	22.0	1551.3	1.014	23.0	1506.9	0.985	24.0	1483.7	0.970	25.0	1479.9	0.968	1.31	16.09	82.59	9.97	2.04	-0.18	1.27	0.56	7/8/80	5054m	0 m	400 kHz
2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
9.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
11.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
12.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
14.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
15.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
17.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
18.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
19.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
21.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
22.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
23.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
24.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			
25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																																			

Cruise: LYNCH 708-80  
 Position: 15-46N 67-45W  
 Calculated Ior: 23.0 Deg-C

Date: 7/8/80  
 Depth: 5054m  
 0 m. 400 KHZ

Depth (cm)	V <sub>F</sub> m/sec	V <sub>L</sub> ratio	Attu. K	% for.	CaCO <sub>3</sub> %	% C	% N	Shear Str.	% Sarc	Silt %	Clay %	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0																
1.0	1459.1	0.980	61.0													
2.0	1467.5	0.973	60.0													
3.0	1467.5	0.973														
4.0	1463.7	0.970	79.1													
5.0	1463.7	0.970														
6.0	1463.7	0.970														
7.0	1483.7	0.970	76.9													
8.0	1479.5	0.966														
9.0	1479.9	0.968	75.0													
10.0	1483.7	0.970														
11.0	1463.7	0.970	76.7													
12.0	1491.4	0.975	69.5													
13.0																
14.0																
15.0																
16.0																
17.0																
18.0																
19.0																
20.0																
21.0																
22.0																
23.0																
24.0																
25.0																

Cruise: LYNCH 708-80      Sample: 14-6      Date: 7/23/80  
 Position: 13°50'N; 67°39'W      Depth: 5054m  
 Calculated for: 23.0 Deg-C      35.00 o/oc      0 m 400 kHz

Depth (cm)	$V_p$ m/sec	$V_p$ Ratio	Attn. $k$	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt			
0.0	1495.5	0.978		84.9								0.25	15.03	84.72	10.47	2.19	-0.09	0.89	0.47
1.0	1484.0	0.970										0.23	15.61	84.17	10.23	2.07	-0.12	0.99	0.50
2.0	1484.0	0.970																	
3.0	1484.0	0.970		80.3															
4.0	1480.2	0.968																	
5.0	1480.2	0.968	78.1																
6.0	1480.2	0.968																	
7.0	1480.2	0.968	76.6																
8.0	1480.2	0.968																	
9.0	1484.0	0.970	75.2																
10.0	1491.6	0.975																	
11.0	1495.5	0.978	71.1																
12.0	1487.8	0.973																	
13.0	1484.0	0.970	72.8																
14.0	1484.0	0.970																	
15.0	1484.0	0.970																	
16.0	1484.0	0.970																	
17.0	1484.0	0.970																	
18.0	1487.8	0.973																	
19.0	1487.8	0.973	72.9																
20.0	1487.8	0.973																	
21.0	1495.5	0.978																	
22.0	1495.5	0.978																	
23.0	1507.2	0.985																	
24.0	1511.1	0.988																	
25.0	1499.3	0.980																	
26.0	1484.0	0.970																	
27.0	1480.2	0.968																	
28.0	1480.2	0.968																	

Cruise: LYNCH 708-80      Sample: 14-7      Date: 7/23/80  
 Position: 13-50N; 67-39W      Depth: 5054m  
 Calculated for: 23.0 Deg-C      0 m      400 kHz

Depth (cm)	VP m/sec	VE Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1491.6	0.975														
1.0	1484.0	0.970														
2.0	1484.0	0.970														
3.0	1484.0	0.970														
4.0	1480.2	0.968														
5.0	1480.2	0.968														
6.0	1480.2	0.968														
7.0	1480.2	0.968														
8.0	1480.2	0.968														
9.0	1480.2	0.968														
10.0	1480.2	0.968														

Cruise: LYNCH 708-80      Sample: 14-8  
 Position: 13°50N; 67°39W      Date: 7/23/80  
 Calculated for: 23.0      Depth: 50.54m  
 Deg-C      35.00 d/oo      0 m      400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1495.5	0.978													
1.0	1487.8	0.973													
2.0	1484.0	0.970													
3.0	1484.0	0.970													
4.0	1484.0	0.970													
5.0	1484.0	0.970													
6.0	1480.2	0.968													
7.0	1480.2	0.968													
8.0	1480.2	0.968													
9.0	1480.2	0.968													
10.0	1480.2	0.968													
11.0	1487.8	0.973													
12.0	1487.8	0.973													
13.0	1495.5	0.978													
14.0	1487.8	0.973													
15.0	1484.0	0.970													
16.0	1484.0	0.970													
17.0	1484.0	0.970													
18.0	1495.5	0.978													
19.0	1503.2	0.983													
20.0	1491.6	0.975													
21.0	1484.0	0.970													
22.0	1476.4	0.965													
23.0	1480.2	0.968													

Depth (cm)	Vp m/sec	Ve m/sec	Ratio k	Attn.			Shear			Mean Phi			Dev	Skew	Kurt	N. Kurt		
				CaCO <sub>3</sub>	C	N	Str.	Sand	Silt	Clay								
0.0	1511.1	0.988									0.82	26.57	72.62	9.41	2.62	-0.26	1.01	0.50
1.0	1495.5	0.978									0.46	16.08	83.47	10.10	2.07	-0.12	1.06	0.52
2.0	1484.0	0.970									0.10	17.91	82.00	9.97	2.06	-0.12	1.04	0.51
3.0	1484.0	0.970									0.15	16.67	83.18	10.02	2.01	-0.12	1.10	0.52
4.0	1484.0	0.970									0.00	20.84	79.16	9.81	2.06	-0.11	1.01	0.50
5.0	1484.0	0.970									0.12	25.05	74.83	9.50	2.07	-0.12	0.99	0.50
6.0	1484.0	0.970									0.23	28.21	71.56	9.41	2.16	-0.10	0.93	0.48
7.0	1484.0	0.970																
8.0	1484.0	0.970																
9.0	1484.0	0.970																
10.0	1487.8	0.973																
11.0	1491.7	0.975																
12.0	1495.5	0.978																
13.0	1495.5	0.978																
14.0	1484.0	0.970																
15.0	1484.0	0.970																
16.0	1484.0	0.970																
17.0	1480.2	0.968																
18.0	1480.2	0.968																
19.0	1480.2	0.968																
20.0	1487.8	0.973																
21.0	1487.8	0.973																
22.0	1491.7	0.975																
23.0	1495.5	0.978																
24.0	1499.4	0.980																
25.0	1507.2	0.985																
26.0	1515.1	0.991																
27.0	1507.2	0.985																
28.0	1487.8	0.973																
29.0	1480.2	0.968																
30.0	1476.4	0.965																
31.0																		
32.0																		
33.0																		

Cruise: LYNCH 708-80      Sample: 14-10      Date: 7/23/80  
 Position: 13°50N; 67°39W      Depth: 5054m  
 Calculated for: 23.0 Deg-C      35.00 o/oo

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1499.4	0.980														
1.0	1487.8	0.973														
2.0	1484.0	0.970														
3.0	1484.0	0.970														
4.0	1484.0	0.970														
5.0	1480.2	0.968														
6.0	1480.2	0.968														
7.0	1480.2	0.968														
8.0	1480.2	0.968														
9.0	1480.2	0.968														
10.0	1487.8	0.973														
11.0	1487.8	0.973														
12.0	1487.8	0.973														
13.0	1491.7	0.975														
14.0	1487.8	0.973														
15.0	1484.0	0.970														
16.0	1480.2	0.968														
17.0	1480.2	0.968														
18.0	1480.2	0.968														
19.0	1484.0	0.970														
20.0	1487.8	0.973														
21.0	1487.8	0.973														
22.0	1491.7	0.975														
23.0	1495.5	0.978														
24.0	1507.2	0.985														
25.0	1515.1	0.991														
26.0	1491.7	0.975														
27.0	1484.0	0.970														

Cruise: LYNCH 708-80		Position: 13°50'N; 67°39'W		Sample: 14-11		Date: 7/23/80	
						Depth: 5054m	
		Calculated for: 23.0 Deg-C		35.00 o/oo		0 m 400 kHz	
Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Attn. k	% Por.	% CaCO <sub>3</sub>	% C N	% Shear Str.	% Silt Clay
0.0	1499.4	0.980					
1.0	1484.0	0.970					
2.0	1484.0	0.970					
3.0	1487.8	0.973					
4.0	1487.8	0.973					
5.0	1484.0	0.970					
6.0	1484.0	0.970					
7.0	1484.0	0.970					
8.0	1484.0	0.970					
9.0	1484.0	0.970					
10.0	1484.0	0.970					
11.0	1487.8	0.973					
12.0	1487.8	0.973					
13.0	1491.7	0.975					
14.0	1487.8	0.973					
15.0	1480.2	0.968					
16.0	1480.2	0.968					
17.0	1480.2	0.968					
18.0	1480.2	0.968					
19.0	1484.0	0.970					
20.0	1487.8	0.973					
21.0	1487.8	0.973					
22.0	1487.8	0.973					
23.0	1491.7	0.975					
24.0	1495.5	0.978					
25.0	1507.2	0.985					
26.0	1505.3	0.983					
27.0	1484.0	0.970					
28.0	1476.4	0.965					
29.0	1476.4	0.965					
30.0	1476.4	0.965					

Cruise: LYNCH 708-80      Sample: 14-12  
 Position: 13-50N; 67-39W      Date: 7/23/80  
 Calculated for: 23.0 Deg-C      Depth: 5054m  
                                         0 m    400 kHz

Depth (cm)	$V_p$ m/sec	$V_p$ Attn. Ratio	$\%$ k	Por.	$\%$ CaCO <sub>3</sub>	$\%$ C	$\%$ N	Shear Str.	$\%$ Sand	$\%$ Silt	Mean Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1507.2	0.985														
1.0	1487.8	0.973														
2.0	1484.0	0.970														
3.0	1484.0	0.970														
4.0	1480.2	0.968														
5.0	1480.2	0.968														
6.0	1480.2	0.968														
7.0	1480.2	0.968														
8.0	1480.2	0.968														
9.0	1480.2	0.968														

Cruise: LYNCH 708-80      Sample: 14-15  
 Position: 13°50'N; 67°39'W      Date: 7/23/80  
 Calculated for: 23.0 Deg-C      Depth: 505.4m  
                                         0 m 400 kHz

Depth (cm)	vP m/sec	vP Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1507.2	0.985														
1.0	1495.5	0.978														
2.0	1484.0	0.970														
3.0	1484.0	0.970														
4.0	1484.0	0.970														
5.0	1480.2	0.968														
6.0	1480.2	0.968														
7.0	1480.2	0.968														
8.0	1480.2	0.968														
9.0	1480.2	0.968														
10.0	1480.2	0.968														
11.0	1484.0	0.970														
12.0	1487.8	0.973														
13.0	1487.8	0.973														
14.0	1491.7	0.975														
15.0	1484.0	0.970														
16.0	1480.2	0.968														
17.0	1480.2	0.968														
18.0	1480.2	0.968														
19.0	1480.2	0.968														
20.0	1480.2	0.968														
21.0	1484.0	0.970														
22.0	1487.8	0.973														
23.0	1495.5	0.978														
24.0	1495.5	0.978														
25.0	1487.8	0.973														

Cruise: LYNCH 708-80      Sample: 14-14  
 Position: 13°50N; 67°39W      Date: 7/23/80  
 Calculated for: 23.0 Deg-C      Depth: 5054m  
                                       0 m 400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CaCO3	% C	% N	% Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1507.2	0.985														
1.0	1491.6	0.975														
2.0	1487.8	0.973														
3.0	1487.8	0.973														
4.0	1487.8	0.973														
5.0	1487.8	0.973														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1484.0	0.970														
9.0	1484.0	0.970														
10.0	1484.0	0.970														
11.0	1484.0	0.970														
12.0	1491.6	0.975														
13.0	1491.6	0.975														
14.0	1491.6	0.975														
15.0	1487.8	0.973														
16.0	1484.0	0.970														
17.0	1484.0	0.970														
18.0	1484.0	0.970														
19.0	1484.0	0.970														
20.0	1487.8	0.973														
21.0	1495.5	0.978														
22.0	1503.2	0.983														
23.0	1503.2	0.983														
24.0	1487.8	0.973														
25.0	1484.0	0.970														

Cruise: LYNCH 708-80			Sample: 14-15			Date: 7/23/80		
Position: 15-5N; 67-39W			Depth: 5054m					
Calculated for: 23.0 Deg-C			0 m 400 kHz					
Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> / Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% Str.	% Sand
0.0	1499.3	0.980						
1.0	1487.8	0.973						
2.0	1487.8	0.973						
3.0	1487.8	0.973						
4.0	1487.8	0.973						
5.0	1484.0	0.970						
6.0	1484.0	0.970						
7.0	1484.0	0.970						
8.0	1484.0	0.970						
9.0	1484.0	0.970						
10.0	1484.0	0.970						
11.0	1484.0	0.970						
12.0	1487.8	0.973						
13.0	1491.6	0.975						
14.0	1487.8	0.973						
15.0	1484.0	0.970						
16.0	1484.0	0.970						
17.0	1484.0	0.970						
18.0	1484.0	0.970						
19.0	1484.0	0.970						
20.0	1484.0	0.970						
21.0	1484.0	0.970						
22.0	1491.6	0.975						
23.0	1495.5	0.978						
24.0	1507.2	0.985						
25.0	1491.6	0.975						
26.0	1484.0	0.970						
27.0	1484.0	0.970						

Cruise: LYNCH 708-80      Sample: 14-16  
 Position: 13°50N; 67°39W      Date: 7/23/80  
 Calculated for: 23.0 Deg-C      Depth: 5054m  
                                         0 m 400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	Mean Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1495.5	0.978														
1.0	1491.6	0.975														
2.0	1484.0	0.970														
3.0	1484.0	0.970														
4.0	1484.0	0.970														
5.0	1484.0	0.970														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1484.0	0.970														
9.0	1484.0	0.970														
10.0	1484.0	0.970														
11.0	1484.0	0.970														
12.0	1491.6	0.975														
13.0	1491.6	0.975														
14.0	1487.8	0.973														
15.0	1484.0	0.970														
16.0	1484.0	0.970														
17.0	1484.0	0.970														
18.0	1484.0	0.970														
19.0	1484.0	0.970														
20.0	1484.0	0.970														
21.0	1484.0	0.970														
22.0	1487.8	0.973														
23.0	1495.5	0.978														
24.0	1487.8	0.973														
25.0	1480.2	0.968														
26.0	1480.2	0.968														



Cruise: LYNCH 708-80      Sample: 14-18  
 Position: 13-50N; 67-39W      Date: 7/23/80  
 Calculated for: 23.0 Deg-C      Depth: 5054m  
                                       0 m 400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1503.2	0.983														
1.0	1487.8	0.973														
2.0	1484.0	0.970														
3.0	1484.0	0.970														
4.0	1484.0	0.970														
5.0	1484.0	0.970														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1484.0	0.970														
9.0	1487.8	0.973														
10.0	1487.8	0.973														
11.0	1487.8	0.973														
12.0	1484.0	0.970														
13.0	1484.0	0.970														
14.0	1484.0	0.970														
15.0	1484.0	0.970														
16.0	1484.0	0.970														
17.0	1491.6	0.975														
18.0	1495.5	0.978														
19.0	1495.5	0.978														
20.0	1499.3	0.980														
21.0	1495.5	0.978														
22.0	1480.2	0.968														
23.0	1480.2	0.968														
24.0	1480.2	0.968														

Cruise: LYNCH 708-80      Sample: 14-19  
 Position: 13°50'N; 67°39'W      Date: 7/23/80  
 Calculated for: 23.0 Deg-C      Depth: 5054m  
                                       0 m 400 kHz

Depth (cm)	VP m/sec	VR Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	N. Kurt
0.0	1484.0	0.970														
1.0	1487.8	0.973														
2.0	1487.8	0.973														
3.0	1487.8	0.973														
4.0	1487.8	0.973														
5.0	1484.0	0.970														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1484.0	0.970														
9.0	1484.0	0.970														
10.0	1484.0	0.970														
11.0	1484.0	0.970														
12.0	1487.8	0.973														
13.0	1487.8	0.973														
14.0	1487.8	0.973														
15.0	1487.8	0.973														
16.0	1484.0	0.970														
17.0	1484.0	0.970														
18.0	1484.0	0.970														
19.0	1484.0	0.970														
20.0	1491.6	0.975														
21.0	1499.3	0.980														
22.0	1511.1	0.988														
23.0	1499.3	0.980														
24.0	1484.0	0.970														
25.0	1484.0	0.970														

Cruise: LYNCH 708-80      Sample: 14-20  
 Position: 13°50'N 67°39'W  
 Calculated for: 23.0 Deg-C      35.00 o/oo

Date: 7/23/80  
 Depth: 5054m  
 0 m 400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1507.2	0.985														
1.0	1487.8	0.973														
2.0	1487.8	0.973														
3.0	1487.8	0.973														
4.0	1487.8	0.973														
5.0	1487.8	0.973														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1484.0	0.970														
9.0	1484.0	0.970														
10.0	1484.0	0.970														
11.0	1484.0	0.970														
12.0	1484.0	0.970														
13.0	1484.0	0.970														
14.0	1484.0	0.970														
15.0	1487.8	0.973														
16.0	1487.8	0.973														
17.0	1484.0	0.970														
18.0	1484.0	0.970														
19.0	1484.0	0.970														
20.0	1484.0	0.970														
21.0	1484.0	0.970														
22.0	1484.0	0.970														
23.0	1487.8	0.973														
24.0	1491.6	0.975														
25.0	1495.5	0.978														
26.0	1499.3	0.980														
27.0	1511.1	0.988														
28.0	1511.1	0.988														
29.0	1495.5	0.978														
30.0	1484.0	0.970														
31.0	1484.0	0.970														
32.0	1484.0	0.970														
33.0	1484.0	0.970														

Cruise: LYNCH 708-80      Sample: 16-1  
 Position: 15°45'N; 67°40'W      Date: 7/24/80  
 Calculated depth: 5054m  
 Lat: 0 m      Long: 400 kHz

Depth (cm)	Vp m/sec	Vf Ratio	Attn. K	% Por.	% CaCO3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	N. Kurt
0.0	1491.6	0.975														
1.0	1491.6	0.975														
2.0	1487.8	0.973														
3.0	1487.8	0.973														
4.0	1484.0	0.970														
5.0	1484.0	0.970														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1484.0	0.970														
9.0	1484.0	0.970														
10.0	1484.0	0.970														
11.0	1484.0	0.970														
12.0	1484.0	0.970														
13.0	1484.0	0.970														
14.0	1484.0	0.970														
15.0	1487.8	0.973														
16.0	1491.6	0.975														
17.0	1499.3	0.980														

Cruise: LYNCH 708-80      Sample: 16-2      Date: 7/24/80  
 Position: 13-45; N67-40W      Depth: 5054m  
 Calculated for: 23.0 Deg-C      35.00 σ/oo      0 m 400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	% Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	N. Kurt
0.0	1503.2	0.983														
1.0	1491.6	0.975														
2.0	1487.8	0.973														
3.0	1487.8	0.973														
4.0	1484.0	0.970														
5.0	1484.0	0.970														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1484.0	0.970														
9.0	1484.0	0.970														
10.0	1484.0	0.970														
11.0	1487.8	0.973														

Cruise: LYNCH 708-80 Sample: 16-3 Date: 7/24/80  
 Position: 13°45'N; 67°40'W Depth: 5054m  
 Calculated for: 23.0 Deg-C 0 m 400 kHz

Cruise: LYNCH 708-80		Position: 13°45'N; 67°40'W		Sample: 16-4		Date: 7/24/80										
				Depth: 5054m												
		Calculated for: 23.0 Deg-C		35.00 d/oo		0 m 400 kHz										
Depth (cm)	Vp m/sec	Vp Ratio	Attn. %	% Por.	% CaCO <sub>3</sub>	% C N	% Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt	
0.0	1495.5	0.978														
1.0	1491.6	0.975														
2.0	1484.0	0.970														
3.0	1484.0	0.970														
4.0	1484.0	0.970														
5.0	1484.0	0.970														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1484.0	0.970														
9.0	1484.0	0.970														
10.0	1484.0	0.970														
11.0	1484.0	0.970														
12.0	1484.0	0.970														
13.0	1484.0	0.970														
14.0	1484.0	0.970														
15.0	1484.0	0.970														
16.0	1491.6	0.975														
17.0	1499.3	0.980														

Cruise: LYNCH 708-80      Sample: 16-5  
 Position: 13°45'N; 67°40'W      Date: 7/24/80  
 Calculated for: 23.0 Deg-C      Depth: 50.54m  
 0 m 400 kHz

Depth (cm)	$V_F$ m/sec	$V_P$ m/sec	Attn. k	% Por.	$\text{CaCO}_3$	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1507.2	0.985														
1.0	1495.5	0.978														
2.0	1487.8	0.973														
3.0	1487.8	0.973														
4.0	1484.0	0.970														
5.0	1484.0	0.970														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1484.0	0.970														
9.0	1484.0	0.970														
10.0	1484.0	0.970														
11.0	1487.8	0.973														
12.0	1491.6	0.975														
13.0	1507.2	0.985														
14.0	1507.2	0.985														
15.0	1499.3	0.980														
16.0	1511.1	0.988														
17.0	1487.8	0.973														

Cruise: LYNCH 708-80      Sample: 16-6  
 Position: 13°45'N; 67°40'W      Date: 7/24/80  
 Calculated for: 23.0 Deg-C      Depth: 5054m  
                                         0 m 400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1491.6	0.975														
1.0	1487.8	0.973														
2.0	1484.0	0.970														
3.0	1484.0	0.970														
4.0	1484.0	0.970														
5.0	1484.0	0.970														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1487.8	0.973														
9.0	1495.5	0.978														
10.0	1495.5	0.978														
11.0	1499.3	0.980														
12.0	1499.3	0.980														
13.0	1503.2	0.983														
14.0	1503.2	0.983														
15.0	1495.5	0.978														

Cruise: LYNCH 708-80      Sample: 16-7      Date: 7/24/80  
 Position: 13°45'N; 67°40'W      Depth: 5054m  
 Calculated for: 23.0 Deg-C      0 m      400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. %	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1491.6	0.975														
1.0	1487.8	0.973														
2.0	1484.0	0.970														
3.0	1484.0	0.970														
4.0	1484.0	0.970														
5.0	1484.0	0.970														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1484.0	0.970														
9.0	1491.6	0.975														
10.0	1495.5	0.978														
11.0	1503.2	0.983														
12.0	1499.3	0.980														
13.0	1484.0	0.970														

Cruise: LYNCH 708-80      Sample: 16-8      Date: 7/24/80  
 Position: 13-45N; 67-40W      Depth: 5054m  
 Calculated for: 23.0 Deg-C      0 m      400 kHz

Depth (cm)	vP m/sec	vF m/sec	Attn. Ratio	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	N.
1.0	1503.2	0.983														
2.0	1491.6	0.975														
3.0	1484.0	0.970														
4.0	1484.0	0.970														
5.0	1484.0	0.970														
6.0	1484.0	0.970														
7.0	1484.0	0.970														
8.0	1487.8	0.973														
9.0	1495.5	0.978														
10.0	1503.2	0.983														
11.0	1511.1	0.988														

Cruise: LYNCH 708-80      Sample: 16-9  
 Position: 13°45'N; 67°40'W      Date: 7/24/80  
 Calculated for: 23.0 Deg-C      Depth: 5054m  
                                         0 m 400 kHz

Depth (cm.)	Vp m/sec	Vp Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1499.2	0.980														
1.0	1491.4	0.975														
2.0	1487.6	0.973														
3.0	1487.6	0.973														
4.0	1487.6	0.973														
5.0	1487.6	0.973														
6.0	1487.6	0.973														
7.0	1487.6	0.973														
8.0	1487.6	0.973														
9.0	1487.6	0.973														
10.0	1487.6	0.973														
11.0	1491.4	0.975														
12.0	1499.2	0.980														
13.0	1507.0	0.985														
14.0	1507.0	0.985														
15.0	1507.0	0.985														
16.0	1510.9	0.988														
17.0	1510.9	0.988														
18.0	1487.6	0.973														
19.0	1480.0	0.968														
20.0	1483.8	0.970														

Cruise: LYNCH 708-80      Sample: 16-10  
 Position: 13°45'N; 67°40'W      Date: 7/24/80  
 Calculated for: 23.0 Deg-C      Depth: 5054m  
 0 m 400 kHz

Depth (cm)	$V_p$ m/sec	$V_p$ Ratio	Attn. $k$	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
2.0	1507.0	0.985														
3.0	1507.0	0.985														
4.0	1499.2	0.980														
5.0	1503.1	0.983														
6.0	1510.9	0.988														
7.0	1514.8	0.990														
8.0	1514.8	0.990														
9.0	1510.9	0.988														
10.0	1503.1	0.983														
11.0	1483.8	0.970														
12.0	1483.8	0.970														

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attr. %	CaCC3 por.	C %	N Str.	Shear %	Sand %	Silt %	Clay %	Mean phi	Dev	Skew	Kurt	N.	Kurt
0.0	1495.3	0.978														
1.0	1491.4	0.975														
2.0	1487.6	0.973														
3.0	1487.6	0.973														
4.0	1487.6	0.973														
5.0	1483.8	0.970														
6.0	1483.8	0.970														
7.0	1483.8	0.970														
8.0	1483.8	0.970														
9.0	1483.8	0.970														
10.0	1483.8	0.970														
11.0	1487.6	0.973														
12.0	1499.2	0.980														
13.0	1510.9	0.988														

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	Por.	CaCO <sub>3</sub>	%	C N	Shear Str.	%	Sand	%	Silt	%	Clay	%	Mean	Dev	Skew	Kurt	N. Kurt
1.0	1503.1	0.983																		
2.0	1503.1	0.983																		
3.0	1518.8	0.993																		
4.0	1522.8	0.996																		
5.0	1510.9	0.988																		
6.0	1495.3	0.976																		
7.0	1495.3	0.978																		
8.0	1499.2	0.980																		
9.0	1499.2	0.980																		
10.0	1503.1	0.983																		
11.0	1507.0	0.985																		
12.0	1510.9	0.988																		
13.0	1581.0	1.034																		
14.0	1547.2	1.012																		
15.0	1495.3	0.978																		
16.0	1480.0	0.968																		
17.0	1480.0	0.968																		
18.0	1480.0	0.968																		
19.0	1480.0	0.968																		
20.0	1480.0	0.968																		

cruise: LYNCH 706-80      Sample: 17-1      Date: 7/25/80  
 position: 13-32N; 64°-45W      Depth: 3517m  
 calculated for: 23.0 Deg-C      0 m      400 kHz

Depth (cm)	VP m/sec	Attrn. k	%	Shear N	%	Mean	Dev	Skew	Kurt	N.
0.0	1510.8	0.988								
1.0	1499.1	0.980								
2.0	1491.4	0.975								
3.0	1491.4	0.975								
4.0	1495.2	0.978								
5.0	1491.4	0.975								
6.0	1491.4	0.975								
7.0	1491.4	0.975								
8.0	1491.4	0.975								
9.0	1491.4	0.975								
10.0	1491.4	0.975								
11.0	1491.4	0.975								
12.0	1491.4	0.975								
13.0	1491.4	0.975								
14.0	1487.5	0.973								
15.0	1487.5	0.973								
16.0	1487.5	0.973								
17.0	1487.5	0.973								
18.0	1491.4	0.975								
19.0	1495.2	0.978								
20.0	1495.2	0.978								
21.0	1491.4	0.975								
22.0	1491.4	0.975								
23.0	1491.4	0.975								
24.0	1499.1	0.980								
						11.07	12.26	76.67	9.63	3.26
									-0.42	1.56
										0.61

Cruise: LYNCH 708-80      Sample: 17-3      Date: 7/25/80  
 Position: 13°32'N, 64°45'W      Depth: 3517m  
 Calculated for: 23.0 Deg-C      35.00 d/o      0 m 400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt	
0.0	150±0	0.983															
1.0	1495.2	0.978	81.6	28.74									18.34	11.25	70.42	8.31	4.11 -0.56 1.22 0.55
2.0	1491.4	0.975											12.64	11.98	75.38	9.41	3.32 -0.46 1.56 0.61
3.0	1491.4	0.975	80.4	26.65									12.31	12.10	75.59	9.46	3.27 -0.44 1.56 0.61
4.0	1491.4	0.975											13.53	15.79	70.68	9.32	3.37 -0.47 1.36 0.58
5.0	1491.4	0.975	79.5	27.74									12.49	11.60	75.91	9.41	3.36 -0.46 1.64 0.62
6.0	1491.4	0.975											7.40	13.23	79.38	9.88	2.89 -0.38 1.67 0.63
7.0	1491.4	0.975	79.1	25.50									5.20	16.28	78.51	9.79	2.69 -0.36 1.39 0.58
8.0	1495.2	0.978											5.07	12.20	82.73	10.05	2.49 -0.32 1.69 0.63
9.0	1491.4	0.975	78.9	24.52									5.92	12.06	82.02	9.79	2.43 -0.43 2.01 0.67
10.0	1491.4	0.975											4.86	12.41	82.73	10.01	2.43 -0.31 1.76 0.64
11.0	1491.4	0.975	77.8	22.32									6.18	13.70	80.12	9.78	2.66 -0.35 1.73 0.63
12.0	1491.4	0.975											6.16	15.27	78.57	9.74	2.70 -0.37 1.60 0.62
13.0	1491.4	0.975	76.3	23.08									5.74	16.24	78.03	9.72	2.70 -0.37 1.54 0.61
14.0	1491.4	0.975											6.64	18.28	75.08	9.61	2.94 -0.39 1.34 0.57
15.0	1491.4	0.975	75.9	22.32													
16.0	1491.4	0.975															
17.0	1495.2	0.978	74.7	22.53													
18.0	1495.2	0.978															
19.0	1491.4	0.975	74.7	23.92													
20.0	1491.4	0.975															
21.0	1491.4	0.975	74.1	24.21													
22.0	1491.4	0.975															
23.0	1491.4	0.975	74.2	24.78													
24.0																	
25.0																	
26.0																	
27.0																	

Cruise: LYNCH 708-80      Sample: 18-1  
 Position: 13°25N; 64°47W      Date: 7/26/80  
 Calculated for: 23.0 Deg-C      Depth: 3517m  
                                         0 m    400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Mod.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1503.1	0.983														
1.0	1495.3	0.978														
2.0	1491.4	0.975														
3.0	1491.4	0.975														
4.0	1487.6	0.973														
5.0	1491.4	0.975														
6.0	1491.4	0.975														
7.0	1487.6	0.973														
8.0	1487.6	0.973														
9.0	1491.4	0.975														
10.0	1491.4	0.975														
11.0	1491.4	0.975														
12.0	1491.4	0.975														
13.0	1491.4	0.975														
14.0	1491.4	0.975														
15.0	1491.4	0.975														
16.0	1495.3	0.978														
17.0	1495.3	0.978														
18.0	1495.3	0.978														
19.0																
20.0																
21.0																
22.0																
23.0																

Cruise: BARTLT 1301-82      Sample: 21-2      Date: 10/18/81  
 Position: 15-07N, 69-24W      Depth: 3937m  
 Calculated for: 23.0 Deg-C      0 m      400 kHz

Cruise: BAKLT 1301-82  
Position: 15°-07'N; 69°-24'W  
Calculated for: 23.0 Deg-C

Date: 10/18/81  
Depth: 3937m  
0 m 400 kHz

Sample: 21-3  
o/oo

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	Caco3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.2	1.001														
0.0	1521.8	0.995														
1.0	1510.1	0.987														
2.0	1510.1	0.982														
3.0	1498.2	0.980														
4.0	1497.4	0.979														
5.0	1494.8	0.977														
6.0	1493.4	0.976														
7.0	1492.3	0.976														
8.0	1492.3	0.976														
9.0	1491.9	0.976														
10.0	1491.9	0.976														
11.0	1490.1	0.974														
12.0	1490.1	0.974														
13.0	1490.1	0.974														
14.0	1490.1	0.974														
15.0	1489.0	0.974														
16.0	1489.0	0.974														
17.0	1487.9	0.973														
18.0	1486.1	0.972														
19.0	1485.7	0.971														
20.0	1484.6	0.971														
21.0	1482.5	0.969														
22.0	1481.7	0.969														
23.0	1481.7	0.969														
24.0	1481.7	0.969														
25.0	1482.1	0.969														
26.0	1489.0	0.974														
27.0	1488.6	0.973														

Cruise: BARTLT 1301-82      Sample: 21-4  
 Position: 15-07N 69-24W  
 Calculated for: 23.0 Deg-C    35.00 o/oo

Date: 10/18/81  
 Depth: 3937m  
 0 m 400 kHz

Depth (cm)	VP m/sec	VE Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1529.1	1.000														
0.0	1518.4	0.993														
1.0	1501.1	0.982														
2.0	1491.5	0.975														
3.0	1489.7	0.974														
4.0	1489.7	0.974														
5.0	1489.0	0.974														
6.0	1488.6	0.973														
7.0	1488.6	0.973														
8.0	1489.4	0.974														
9.0	1488.6	0.973														
10.0	1487.9	0.973														
11.0	1488.3	0.973														
12.0	1486.6	0.972														
13.0	1486.1	0.972														
14.0	1484.5	0.970														
15.0	1482.1	0.969														
16.0	1481.0	0.968														
17.0	1480.7	0.968														
18.0	1480.3	0.968														
19.0	1479.9	0.968														
20.0	1479.2	0.967														
21.0	1479.2	0.967														
22.0	1479.2	0.967														
23.0	1481.4	0.969														
24.0	1483.2	0.970														
25.0	1481.7	0.969														
26.0	1481.4	0.969														
27.0	1479.2	0.967														

Cruise: BARTLT 1301-82      Sample: 21-5  
 Position: 15°07'N; 69°24'W      Date: 10/18/81  
 Calculated for: 23.0 Deg-C      Depth: 3937m  
 0 m 400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. %	% POR.	% CaCO <sub>3</sub>	% C	% N	% Shear	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1527.9	0.999														
0.0	1519.9	0.994														
1.0	1514.6	0.990														
2.0	1505.4	0.983														
3.0	1492.6	0.976														
4.0	1492.6	0.976														
5.0	1489.4	0.974														
6.0	1488.6	0.973														
7.0	1488.6	0.973														
8.0	1488.6	0.973														
9.0	1487.2	0.972														
10.0	1487.5	0.973														
11.0	1488.3	0.973														
12.0	1487.9	0.973														
13.0	1488.3	0.973														
14.0	1486.4	0.972														
15.0	1484.3	0.970														
16.0	1481.4	0.969														
17.0	1480.7	0.968														
18.0	1479.6	0.967														
19.0	1479.9	0.968														
20.0	1479.6	0.967														
21.0	1478.1	0.966														
22.0	1479.2	0.967														
23.0	1479.2	0.967														
24.0	1479.2	0.967														
25.0	1480.7	0.968														
26.0	1479.6	0.967														
27.0	1477.8	0.966														
28.0	1477.8	0.966														
29.0	1478.1	0.966														

Cruise: BAKTL1 1301-82  
 Position: 15-07N; 65-24W  
 Calculated for: 23.0 Deg-C

Date: 10/18/81  
 Depth: 3937m  
 0 m 400 kHz

Depth (cm)	V <sub>P</sub> m/sec (cn)	V <sub>P</sub> m/sec ratio	Attr. K	% Pcr.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N.	kurt
WATER	1529.1	1.000															
0.0	1518.8	0.993															
1.0	1504.5	0.984															
2.0	1499.6	0.961															
3.0	1484.8	0.977															
4.0	1493.0	0.976															
5.0	1491.5	0.975															
6.0	1491.5	0.975															
7.0	1491.5	0.975															
8.0	1488.6	0.973															
9.0	1491.2	0.975															
10.0	1490.8	0.975															
11.0	1485.4	0.971															
12.0	1485.4	0.971															
13.0	1485.4	0.971															
14.0	1484.6	0.971															
15.0	1484.6	0.971															
16.0	1484.6	0.971															
17.0	1481.7	0.969															
18.0	1481.7	0.965															
19.0	1480.3	0.968															
20.0	1479.6	0.967															
21.0	1478.5	0.967															
22.0	1480.3	0.968															
23.0	1478.1	0.966															
24.0	1478.5	0.967															
25.0	1478.5	0.967															
26.0	1478.5	0.967															
27.0	1477.1	0.966															
28.0	1476.0	0.965															
29.0	1477.4	0.966															
30.0	1476.3	0.965															
31.0	1474.9	0.964															
32.0	1479.9	0.968															
33.0																	

Cruise: BARTLT 1301-82      Sample: 22-2\*

Position: 15-07N; 69-22W      Date: 10/19/81

Calculated for: 25.0 Deg-C      Depth: 393.4m

0 m 400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	1572.4	1.028														
2.0	1551.2	1.014														
3.0	1541.8	1.008														
4.0	1537.9	1.006														
5.0	1535.9	1.004														
6.0	1528.6	0.999														
7.0	1518.3	0.993														
8.0	1512.7	0.989														
9.0	1511.5	0.988														
10.0	1508.5	0.986														
11.0	1506.7	0.985														
12.0	1506.7	0.985														
13.0	1503.7	0.983														
14.0	1503.7	0.983														
15.0	1502.2	0.982														
16.0	1502.2	0.982														
17.0	1502.2	0.982														
18.0	1502.2	0.982														
19.0	1500.0	0.981														
20.0	1498.5	0.980														
21.0	1498.5	0.980														
22.0	1498.5	0.980														
23.0	1495.2	0.978														
24.0	1496.3	0.978														
25.0	1495.9	0.978														
26.0	1494.5	0.977														
27.0	1494.8	0.977														
28.0	1495.2	0.978														
29.0	1493.0	0.976														
30.0	1493.4	0.976														
31.0	1490.8	0.975														
32.0	1494.1	0.977														
33.0	1491.9	0.976														
34.0	1498.5	0.980														

\*Acoustic Data in Error

Cruise: BARTLT 1301-82      Sample: 23-1  
 Position: 15°07'N; 69°24'W      Date: 10/19/81  
 Calculated for: 23.0      Depth: 3933m  
 Deg-C      0 m      400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	1495.6	0.978	0.835												
2.0	1494.8	0.977	0.820												
3.0	1496.7	0.979	0.820												
4.0	1498.9	0.980	0.922												
5.0	1497.8	0.979	0.903												14.30
6.0	1498.5	0.980	0.942												
7.0	1498.9	0.980	0.964												36.30
8.0	1498.9	0.980	1.012												
9.0	1498.5	0.980	1.066												
10.0	1501.5	0.982	1.131												40.40
11.0	1500.7	0.981	1.169												
12.0	1498.5	0.980	1.066												
13.0	1498.5	0.980	1.038												45.20
14.0	1496.3	0.978	0.964												
15.0	1495.9	0.978	0.964												
16.0	1495.2	0.978	0.964												
17.0	1494.5	0.977	0.942												46.40
18.0	1493.4	0.976	0.851												
19.0	1492.6	0.976	0.805												
20.0	1491.5	0.975	0.740												
21.0	1489.7	0.974	0.717												
22.0	1488.6	0.973	0.638												
23.0	1489.0	0.974	0.588												27.40
24.0	1488.2	0.973	0.620												
25.0	1489.7	0.974	0.656												28.50
26.0	1490.1	0.974	0.675												
27.0	1489.3	0.974	0.638												
28.0	1489.3	0.974	0.638												
29.0	1488.2	0.973	0.588												25.60
30.0	1488.6	0.973	0.588												
31.0	1489.3	0.974	0.638												
32.0	1490.4	0.975	0.696												
33.0	1490.4	0.975	0.675												
34.0	1491.2	0.975	0.604												
35.0	1490.1	0.974	0.573												
36.0	1487.5	0.973	0.588												
37.0	1488.6	0.973	0.558												
38.0	1486.8	0.972	0.518												

Cruise: BARTLT 1301-82		Sample:	23-2	Date: 10/19/81													
Position: 15-07N 69-24W		Depth:	3933m														
Calculated for: 23.0 Deg-C		0 m	400 kHz														
Depth (cm)	Vp m/sec	VP Ratio	Attn. k	% POR.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N.	Kurt
1.0	1497.4	0.979	0.820														
2.0	1497.8	0.979	0.835														
3.0	1499.3	0.980	0.820														
4.0	1501.8	0.982	0.820														
5.0	1502.6	0.982	0.942														
6.0	1502.2	0.982	1.012														
7.0	1502.2	0.982	1.012														
8.0	1503.7	0.983	1.082														
9.0	1505.5	0.984	1.131														
10.0	1506.3	0.985	1.131														
11.0	1504.8	0.984	1.234														
12.0	1502.9	0.983	1.097														
13.0	1501.1	0.982	0.987														
14.0	1502.9	0.983	1.066														
15.0	1500.7	0.981	1.066														
16.0	1498.5	0.980	0.964														
17.0	1497.0	0.979	0.922														
18.0	1496.3	0.978	0.820														
19.0	1495.2	0.978	0.778														
20.0	1493.7	0.977	0.717														
21.0	1492.3	0.976	0.706														
22.0	1490.5	0.975	0.685														
23.0	1489.7	0.974	0.638														
24.0	1488.3	0.973	0.620														
25.0	1488.6	0.973	0.675														
26.0	1487.9	0.973	0.696														
27.0	1488.3	0.973	0.696														
28.0	1489.0	0.974	0.696														
29.0	1487.9	0.973	0.620														
30.0	1487.2	0.972	0.604														
31.0	1488.6	0.973	0.675														
32.0	1488.6	0.973	0.717														
33.0	1487.6	0.973	0.740														
34.0	1488.3	0.973	0.638														
35.0	1487.6	0.973	0.558														
36.0	1487.6	0.973	0.518														
37.0	1486.5	0.972	0.544														
38.0	1487.6	0.973	0.656														

Cruise: BARTLT 1301-82      Sample: 24-3  
Position: 15°06'N; 69°24'W      Date: 10/19/81  
Calculated for: 23.0 Deg-C      Depth: 3936m  
                                        0 m 400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. k	% POR.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	1516.0	0.991														
2.0	1518.7	0.993														
3.0	1516.8	0.992														
4.0	1509.6	0.987														
5.0	1507.4	0.986														
6.0	1502.9	0.983														
7.0	1497.4	0.979														
8.0	1495.2	0.978														
9.0	1495.2	0.978														
10.0	1495.2	0.978														
11.0	1492.6	0.976														
12.0	1492.6	0.976														
13.0	1492.6	0.976														
14.0	1495.2	0.978														
15.0	1493.7	0.977														
16.0	1493.4	0.976														
17.0	1493.4	0.976														
18.0	1492.3	0.976														
19.0	1491.9	0.976														
20.0	1490.8	0.975														
21.0	1489.0	0.974														
22.0	1488.3	0.973														
23.0	1487.2	0.972														
24.0	1487.2	0.972														
25.0	1486.5	0.972														
26.0	1489.0	0.974														
27.0	1489.0	0.974														
28.0	1489.7	0.974														
29.0	1492.6	0.976														
30.0	1487.9	0.973														
31.0	1486.5	0.972														

Cruise: BARTLT 1301-82      Sample: 24-4  
Position: 15-06N; 69-24W      Date: 10/19/81  
Calculated for: 23.0 Deg-C      Depth: 3936m  
                                      0 m    400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. k	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	N. Kurt
1.0															
2.0															
3.0															
4.0															
5.0															
	0.232	0.049													
	0.270	0.051													

Cruise: BARTLT 1301-82  
 Position: 15-06N; 69-24W  
 Calculated for: 23.0 Deg-C

Date: 10/19/81  
 Depth: 3936m  
 0 m 400 kHz

Sample: 24-6  
 35.00 d/oo

Depth (cm)	VP m/sec	Attn. k	VP Ratio	% Por.	Caco3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Runt
1.0	1532.5	1.002														
2.0	1502.2	0.982														
3.0	1496.7	0.979														
4.0	1495.2	0.978														
5.0	1493.4	0.976														
6.0	1493.4	0.976														
7.0	1494.1	0.977														
8.0	1494.1	0.977														
9.0	1494.1	0.977														
10.0	1494.1	0.977														
11.0	1493.4	0.976														
12.0	1493.4	0.976														
13.0	1494.5	0.977														
14.0	1494.5	0.977														
15.0	1495.2	0.978														
16.0	1494.5	0.977														
17.0	1492.3	0.976														
18.0	1491.5	0.975														
19.0	1491.9	0.976														
20.0	1492.3	0.976														
21.0	1490.5	0.975														
22.0	1489.4	0.974														
23.0	1488.3	0.973														
24.0	1487.2	0.972														
25.0	1487.2	0.972														
26.0	1487.9	0.973														
27.0	1486.5	0.972														
28.0	1486.5	0.972														
29.0	1481.8	0.969														
30.0	1485.4	0.971														
31.0	1485.4	0.971														
32.0	1485.4	0.971														
33.0	1487.9	0.973														

Cruise: BARTLT 1301-82      Sample: 24-7  
 Position: 15-06N; 69-24W  
 Calculated for: 23.0 Deg-C    35.00 o/oo

Date: 10/19/81  
 Depth: 3936m  
 0 m 400 kHz

Depth (cm)	vP m/sec	vF m/sec	Ratio	Attn. K	% Por.	% Cacc3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1536.7	1.005															
0.0	1526.7	0.998															
1.0	1517.2	0.992															
2.0	1513.0	0.989															
3.0	1508.9	0.987															
4.0	1504.8	0.984															
5.0	1500.7	0.981															
6.0	1500.7	0.981															
7.0	1498.5	0.980															
8.0	1498.5	0.980															
9.0	1498.5	0.980															
10.0	1498.5	0.980															
11.0	1498.5	0.980															
12.0	1498.5	0.980															
13.0	1499.6	0.981															
14.0	1498.9	0.980															
15.0	1498.5	0.980															
16.0	1497.8	0.979															
17.0	1497.8	0.979															
18.0	1496.3	0.978															
19.0	1495.2	0.978															
20.0	1493.0	0.976															
21.0	1493.0	0.976															
22.0	1491.5	0.975															
23.0	1491.5	0.975															
24.0	1492.3	0.976															
25.0	1491.2	0.975															
26.0	1489.0	0.974															
27.0	1491.2	0.975															
28.0	1489.7	0.974															
29.0	1490.8	0.975															
30.0	1487.5	0.973															
31.0	1485.4	0.971															
32.0	1488.6	0.973															
33.0	1488.6	0.973															

Cruise: BARTLT 1301-82      Sample: 24-8-1  
 Position: 15-06N; 69-24W      Date: 10/19/81  
 Calculated for: 23.0 Deg-C      Depth: 3936m  
                                       0 m    400 kHz

Depth (cm)	$v_p$ m/sec	$v_p$ Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	1520.0	0.994														
2.0	1502.8	0.983														
3.0	1502.0	0.982														
4.0	1498.3	0.980														
5.0	1500.2	0.981														
6.0	1505.4	0.984														
7.0	1498.7	0.980														
8.0	1498.7	0.980														
9.0	1498.7	0.980														
10.0	1498.7	0.980														
11.0	1498.7	0.980														
12.0	1499.4	0.980														
13.0	1498.7	0.980														
14.0	1498.7	0.980														
15.0	1497.6	0.979														
16.0	1497.6	0.979														
17.0	1497.2	0.979														
18.0	1496.1	0.978														
19.0	1494.7	0.977														
20.0	1493.9	0.977														
21.0	1493.9	0.977														
22.0	1492.8	0.976														
23.0	1493.2	0.976														
24.0	1493.6	0.977														
25.0	1493.6	0.977														
26.0	1493.6	0.977														
27.0	1493.2	0.976														
28.0	1492.1	0.976														
29.0	1492.1	0.976														
30.0	1493.2	0.976														
31.0	1486.3	0.972														
32.0	1489.5	0.974														
33.0	1489.5	0.974														
34.0	1489.5	0.974														
35.0	1489.5	0.974														

Cruise: BARTLT 1301-82      Sample: 24-8-2  
 Position: 15-06N; 69-24W  
 Calculated for: 23.0      Deg-C      35.00 o/o

Date: 10/19/81  
 Depth: 3936m  
 0 m 400 kHz

Depth (cm)	$V_p$ m/sec	$V_p$ Ratio	Attn. k	% Por.	% $\text{CaCO}_3$	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	1523.6	0.996														
2.0	1501.1	0.982														
3.0	1497.4	0.979														
4.0	1501.5	0.982														
5.0	1495.2	0.978														
6.0	1494.5	0.977														
7.0	1494.8	0.977														
8.0	1494.8	0.977														
9.0	1494.8	0.977														
10.0	1494.8	0.977														
11.0	1494.8	0.977														
12.0	1494.8	0.977														
13.0	1495.2	0.978														
14.0	1493.7	0.977														
15.0	1493.7	0.977														
16.0	1492.6	0.976														
17.0	1492.6	0.976														
18.0	1491.2	0.975														
19.0	1489.7	0.974														
20.0	1489.0	0.974														
21.0	1487.6	0.973														
22.0	1486.5	0.972														
23.0	1486.5	0.972														
24.0	1486.5	0.972														
25.0	1486.5	0.972														
26.0	1486.5	0.972														
27.0	1485.0	0.971														
28.0	1485.0	0.971														
29.0	1485.0	0.971														
30.0	1484.3	0.971														
31.0	1484.3	0.971														
32.0	1478.2	0.967														
33.0	1483.6	0.970														
34.0	1484.3	0.971														
35.0	1485.4	0.971														

Cruise: BARTLT 1301-82      Sample: 24-8-3  
 Position: 15-06N; 69-24W      Date: 10/19/81  
 Calculated for: 23.0 Deg-C      Depth: 3936m  
                                       0 m 400 kHz

Depth (cm)	$V_F$ m/sec	$V_P$ m/sec	Attn. Ratio	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	N. Kurt
1.0	1497.0	0.979														
2.0	1498.9	0.980														
3.0	1499.6	0.981														
4.0	1500.0	0.981														
5.0	1500.0	0.981														
6.0	1499.6	0.981														
7.0	1499.6	0.981														
8.0	1500.7	0.981														
9.0	1498.1	0.980														
10.0	1498.5	0.980														
11.0	1497.4	0.979														
12.0	1498.1	0.980														
13.0	1497.8	0.979														
14.0	1497.8	0.979														
15.0	1497.4	0.979														
16.0	1493.7	0.977														
17.0	1493.0	0.976														
18.0	1491.9	0.976														
19.0	1489.7	0.974														
20.0	1487.9	0.973														
21.0	1486.8	0.972														
22.0	1485.7	0.971														
23.0	1486.8	0.972														
24.0	1486.5	0.972														
25.0	1487.2	0.972														
26.0	1486.8	0.972														
27.0	1486.1	0.972														
28.0	1486.1	0.972														
29.0	1485.4	0.971														
30.0	1486.1	0.972														
31.0	1487.2	0.972														
32.0	1486.5	0.972														
33.0	1485.7	0.971														
34.0	1485.7	0.971														
35.0	1486.5	0.972														

Cruise: BARD LT 1301-82      Sample: 24-8-4  
 Position: 15-06N, 69-24W      Date: 10/19/81  
 Calculated for: 23.0 Deg-C      Depth: 3936m  
 0 m 400 kHz

Depth (cm)	$v_p$ m/sec	$v_p/v_s$ Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	1500.0	0.981														
2.0	1498.9	0.980														
3.0	1500.7	0.981														
4.0	1500.7	0.981														
5.0	1501.1	0.982														
6.0	1499.3	0.980														
7.0	1500.0	0.981														
8.0	1501.1	0.982														
9.0	1501.8	0.982														
10.0	1502.6	0.982														
11.0	1502.2	0.982														
12.0	1501.8	0.982														
13.0	1503.3	0.983														
14.0	1501.1	0.982														
15.0	1498.1	0.980														
16.0	1497.0	0.979														
17.0	1495.2	0.978														
18.0	1496.3	0.978														
19.0	1494.8	0.977														
20.0	1491.9	0.976														
21.0	1490.5	0.975														
22.0	1489.7	0.974														
23.0	1490.8	0.975														
24.0	1490.5	0.975														
25.0	1490.8	0.975														
26.0	1490.8	0.975														
27.0	1489.7	0.974														
28.0	1488.6	0.973														
29.0	1489.0	0.974														
30.0	1489.7	0.974														
31.0	1490.1	0.974														
32.0	1488.6	0.973														
33.0	1489.7	0.974														
34.0	1487.6	0.973														
35.0	1490.5	0.975														

Cruise: BAKLT 1301-82  
Position: 15-06N; 69-24W  
Calculated for: 23.0 Deg-C

Date: 10/19/81  
Depth: 3936m  
0 m 400 kHz

Depth (cm)	VP m/sec	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	1508.7	0.986													
2.0	1497.2	0.979													
3.0	1496.9	0.979													
4.0	1496.9	0.979													
5.0	1495.8	0.978													
6.0	1496.1	0.978													
7.0	1495.8	0.978													
8.0	1496.5	0.978													
9.0	1496.9	0.979													
10.0	1497.6	0.979													
11.0	1497.2	0.979													
12.0	1497.2	0.979													
13.0	1497.6	0.979													
14.0	1496.9	0.979													
15.0	1495.4	0.978													
16.0	1493.9	0.977													
17.0	1492.5	0.976													
18.0	1492.1	0.976													
19.0	1490.6	0.975													
20.0	1488.8	0.973													
21.0	1488.5	0.973													
22.0	1488.5	0.973													
23.0	1488.1	0.973													
24.0	1487.7	0.973													
25.0	1487.7	0.973													
26.0	1487.7	0.973													
27.0	1487.7	0.973													
28.0	1487.0	0.972													
29.0	1486.3	0.972													
30.0	1486.6	0.972													
31.0	1487.0	0.972													
32.0	1487.0	0.972													
33.0	1487.0	0.972													
34.0	1487.4	0.973													
35.0	1487.4	0.973													
36.0	1487.7	0.973													

Cruise: BARTLT 1301-82  
Position: 15-06N; 69-22W  
Calculated for: 23.0 Deg-C

Date: 10/21/81  
Depth: 3940m  
0 m 400 kHz

Sample: 26-1

Depth (cm)	VP m/sec	Attn. Ratio	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1529.1	1.000													
0.0	1520.3	0.994													
1.0	1505.0	0.984													
2.0	1500.5	0.981													
3.0	1498.7	0.980													
4.0	1498.7	0.980													
5.0	1499.4	0.980													
6.0	1499.4	0.980													
7.0	1499.8	0.981													
8.0	1502.4	0.982													
9.0	1502.0	0.982													
10.0	1501.3	0.982													
11.0	1502.8	0.983													
12.0	1503.9	0.983													
13.0	1503.9	0.983													
14.0	1502.8	0.983													
15.0	1502.8	0.983													
16.0	1502.8	0.983													
17.0	1502.4	0.982													
18.0	1500.5	0.981													
19.0	1498.7	0.980													
20.0	1494.3	0.977													
21.0	1493.6	0.977													
22.0	1492.5	0.976													
23.0	1491.0	0.975													
24.0	1489.6	0.974													
25.0	1490.3	0.974													
26.0	1488.6	0.973													
27.0	1489.9	0.974													
28.0	1489.6	0.974													
29.0	1488.6	0.973													
30.0	1488.6	0.973													

Cruise: BARTLT 1301-82      Sample: 26-2  
 Position: 15-06N; 69-22W      Date: 10/21/81  
 Calculated for: 23.0 Deg-C      Depth: 3940m  
 0 m      400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1529.9	1.000													
0.0	1527.9	0.999													
1.0	1508.3	0.986	83.0	63.73											
2.0	1503.9	0.983													
3.0	1500.9	0.981													
4.0	1500.2	0.981													
5.0	1500.2	0.981													
6.0	1500.2	0.981													
7.0	1501.6	0.982													
8.0	1501.6	0.982													
9.0	1500.9	0.981													
10.0	1502.4	0.982													
11.0	1504.6	0.984													
12.0	1505.7	0.985													
13.0	1505.3	0.984													
14.0	1506.5	0.985													
15.0	1506.1	0.985													
16.0	1505.7	0.985													
17.0	1503.1	0.983													
18.0	1501.6	0.982													
19.0	1499.8	0.981													
20.0	1498.3	0.980													
21.0	1496.1	0.978													
22.0	1495.8	0.978													
23.0	1493.2	0.976													
24.0	1492.1	0.976													
25.0	1490.3	0.974													
26.0	1490.6	0.975													
27.0	1491.0	0.975													
28.0	1491.7	0.975													
29.0	1491.0	0.975													
30.0	1490.3	0.974													
31.0	1489.2	0.974													
32.0	1489.6	0.974													
33.0	1489.2	0.974													
34.0															
35.0															
36.0															
37.0															

Cruise: BARTLT 1301-82      Sample: 26-3  
 Position: 15°06'N; 69°22'W      Date: 10/21/81  
 Calculated for: 23.0 Deg-C      Depth: 3940m  
                                         0 m 400 kHz

Depth (cm)	v <sub>P</sub> m/sec	v <sub>S</sub> m/sec	Attn. Ratio	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1529.9	1.000														
0.0	1512.1	0.989														
1.0	1500.2	0.981														
2.0	1499.8	0.981														
3.0	1500.2	0.981														
4.0	1501.3	0.982														
5.0	1503.9	0.983														
6.0	1502.0	0.982														
7.0	1501.6	0.982														
8.0	1501.6	0.982														
9.0	1502.4	0.982														
10.0	1505.0	0.984														
11.0	1505.3	0.984														
12.0	1505.3	0.984														
13.0	1505.3	0.984														
14.0	1505.7	0.985														
15.0	1505.7	0.985														
16.0	1505.0	0.984														
17.0	1502.8	0.983														
18.0	1501.3	0.982														
19.0	1496.9	0.979														
20.0	1497.6	0.979														
21.0	1493.9	0.977														
22.0	1490.6	0.975														
23.0	1490.3	0.974														
24.0	1490.3	0.974														
25.0	1490.3	0.974														
26.0	1491.0	0.975														
27.0	1491.0	0.975														
28.0	1489.6	0.974														
29.0	1489.9	0.974														
30.0	1487.4	0.973														
31.0	1482.3	0.969														
32.0	1489.2	0.974														
33.0	1488.1	0.973														

Cruise: BART'ly 1301-82      Sample: 26-4  
 Position: 15°-06N; 69°-22W  
 Calculated for: 23.0 Deg-C

Date: 10/21/81  
 Depth: 3940m  
 0 m 400 kHz

Depth (cm)	VP m/sec	VE Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.5	1.001	0.000													
0.0	1503.7	0.983	0.679													
1.0	1501.8	0.982	0.790													
2.0	1498.9	0.980	0.772													
3.0	1498.9	0.980	0.738													
4.0	1500.0	0.981	0.738													
5.0	1500.7	0.981	0.899													
6.0	1502.2	0.982	0.954													
7.0	1501.5	0.982	0.954													
8.0	1501.5	0.982	0.954													
9.0	1502.9	0.983	1.019													
10.0	1503.7	0.983	1.019													
11.0	1503.3	0.983	1.056													
12.0	1503.3	0.983	1.019													
13.0	1502.6	0.982	0.954													
14.0	1501.8	0.982	0.939													
15.0	1500.7	0.981	0.925													
16.0	1499.3	0.980	0.887													
17.0	1497.4	0.979	0.810													
18.0	1496.7	0.979	0.707													
19.0	1494.1	0.977	0.693													
20.0	1491.9	0.976	0.640													
21.0	1490.1	0.974	0.628													
22.0	1490.1	0.974	0.605													
23.0	1489.7	0.974	0.628													
24.0	1489.7	0.974	0.652													
25.0	1489.7	0.974	0.665													
26.0	1490.1	0.974	0.679													
27.0	1489.0	0.974	0.616													
28.0	1489.0	0.974	0.563													
29.0	1487.2	0.972	0.563													
30.0	1489.0	0.974	0.628													
31.0	1489.0	0.974	0.679													
32.0	1489.7	0.974	0.679													
33.0	1490.5	0.975	0.616													

Cruise: BARTLT 1301-82      Sample: 28-1  
 Position: 15-0'N; 69-20'W      Date: 10/22/81  
 Calculated for: 23.0 Deg-C      Depth: 3949m  
                                         0 m    400 kHz

Depth (cm)	$V_F$ m/sec	$V_P$ m/sec	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1532.7	1.002	-0.014													
0.0	1513.7	0.990	0.618													
1.0	1501.5	0.982	0.732													
2.0	1500.4	0.981	0.779													
3.0	1500.7	0.981	0.834													
4.0	1501.1	0.981	0.779													
5.0	1500.0	0.981	0.806													
6.0	1501.5	0.982	0.865													
7.0	1500.0	0.981	0.957													
8.0	1501.8	0.982	1.002													
9.0	1502.6	0.982	1.052													
10.0	1501.5	0.982	1.052													
11.0	1501.5	0.982	1.052													
12.0	1501.5	0.982	1.026													
13.0	1502.6	0.982	1.081													
14.0	1500.7	0.981	1.052													
15.0	1500.7	0.981	0.979													
16.0	1498.9	0.980	0.957													
17.0	1497.4	0.979	0.937													
18.0	1494.8	0.977	0.865													
19.0	1494.8	0.977	0.834													
20.0	1493.0	0.976	0.710													
21.0	1492.3	0.976	0.603													
22.0	1491.6	0.975	0.618													
23.0	1491.2	0.975	0.603													
24.0	1491.2	0.975	0.603													
25.0	1491.2	0.975	0.635													
26.0	1491.2	0.975	0.652													

Cruise: BARTLI 1301-82      Sample: 28-2 \*

Position: 15-07N; 69-20W      Date: 10/22/81

Calculated for: 23.0      Depth: 3949m

Deg-C      35.00 d/oo

Depth (cm)	$v_p$ m/sec	$v_p$ Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1569.3	1.026	-0.012												
0.0	1549.4	1.013	0.638												
1.0	1536.6	1.005	0.775												
2.0	1535.8	1.004	0.844												
3.0	1535.8	1.004	0.871												
4.0	1535.8	1.004	0.899												
5.0	1535.8	1.004	0.964												
6.0	1536.2	1.004	0.947												
7.0	1536.6	1.005	0.947												
8.0	1536.9	1.005	0.964												
9.0	1536.6	1.005	0.982												
10.0	1535.0	1.004	1.002												
11.0	1535.8	1.004	1.002												
12.0	1537.3	1.005	0.947												
13.0	1536.6	1.005	0.930												
14.0	1536.2	1.004	0.844												
15.0	1536.2	1.004	0.871												
16.0	1533.9	1.003	0.844												
17.0	1533.5	1.003	0.786												
18.0	1532.7	1.002	0.726												
19.0	1531.2	1.001	0.652												
20.0	1527.3	0.999	0.638												
21.0	1524.3	0.997	0.585												
22.0	1525.4	0.997	0.585												
23.0	1525.4	0.997	0.597												
24.0	1525.4	0.997	0.652												

\*Acoustic Data in Error

Cruise: BAKPLI 1301-82      Sample: 29-1      Date: 10/23/81  
 Position: 15-03N 69-21W      Depth: 3959m  
 Calculated for: 23.0 Deg-C      35.00 o/oo      0 m 400 kHz

Depth .cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1531.2	1.001	0.000													
0.0	1515.2	0.991	0.558													
1.0	1498.9	0.980	0.696													
2.0	1496.3	0.978	0.791													
3.0	1495.6	0.978	0.867													
4.0	1496.7	0.979	0.885													
5.0	1496.3	0.978	0.835													
6.0	1496.3	0.978	0.885													
7.0	1495.2	0.978	0.922													
8.0	1496.3	0.978	0.942													
9.0	1496.3	0.978	0.942													
10.0	1496.3	0.978	0.964													
11.0	1496.7	0.979	1.012													
12.0	1499.6	0.981	0.964													
13.0	1497.8	0.979	0.964													
14.0	1497.8	0.979	0.922													
15.0	1496.7	0.979	0.885													
16.0	1495.9	0.978	0.964													
17.0	1493.7	0.977	0.922													
18.0	1495.2	0.978	0.791													
19.0	1491.2	0.975	0.696													
20.0	1491.9	0.976	0.638													
21.0	1490.8	0.975	0.638													
22.0	1489.4	0.974	0.620													
23.0	1488.6	0.973	0.573													
24.0	1488.3	0.973	0.573													
25.0	1489.0	0.974	0.638													
26.0	1489.4	0.974	0.620													
27.0	1489.4	0.974	0.638													
28.0	1489.7	0.974	0.675													
29.0	1490.5	0.975	0.717													
30.0																
31.0																

Cruise: BARTLT 1301-82      Sample: 29-2  
 Position: 15-03N; 69-21W      Date: 10/23/81  
 Calculated for: 23.0 Deg-C      Depth: 3959m  
 0 m 400 kHz

Depth (cm)	$v_p$ m/sec	$v_p$ Ratio	Attr. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1532.4	1.002	0.820													
0.0	1517.5	0.992	0.573													
1.0	1500.0	0.981	0.765													
2.0	1498.5	0.980	0.820													
3.0	1497.0	0.979	0.835													
4.0	1497.4	0.979	0.835													
5.0	1498.1	0.980	0.885													
6.0	1498.5	0.980	0.942													
7.0	1497.4	0.979	0.942													
8.0	1498.1	0.980	0.987													
9.0	1498.1	0.980	1.038													
10.0	1498.9	0.980	1.066													
11.0	1499.6	0.981	1.066													
12.0	1498.5	0.980	0.987													
13.0	1500.4	0.981	0.922													
14.0	1498.9	0.980	0.922													
15.0	1498.5	0.980	0.964													
16.0	1496.7	0.979	0.922													
17.0	1498.7	0.979	0.867													
18.0	1495.9	0.978	0.820													
19.0	1494.8	0.977	0.765													
20.0	1494.1	0.977	0.729													
21.0	1493.0	0.976	0.656													
22.0	1490.5	0.975	0.638													
23.0	1489.4	0.974	0.604													
24.0	1489.4	0.974	0.588													
25.0	1489.4	0.974	0.638													
26.0	1490.5	0.975	0.717													
27.0	1491.6	0.975	0.717													
28.0	1491.2	0.975	0.696													
29.0	1491.6	0.975	0.638													
30.0	1492.3	0.976	0.717													
31.0	1491.6	0.975	0.675													

Cruise: BARTLT 1301-82      Sample: 29-3  
 Position: 15-03N 69-21W      Date: 10/23/81  
 Calculated for: 23.0 Deg-C      Depth: 3959m  
 0 m 400 kHz

Depth (cm)	VP m/sec	Vp Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.1	1.000	0.000													
0.0	1528.5	0.999	0.218													
1.0	1507.8	0.986	0.820													
2.0	1495.6	0.978	0.729													
3.0	1497.0	0.979	0.778													
4.0	1497.0	0.979	0.885													
5.0	1498.1	0.980	0.903													
6.0	1498.9	0.980	0.903													
7.0	1498.5	0.980	0.885													
8.0	1498.9	0.980	0.964													
9.0	1498.9	0.980	1.012													
10.0	1498.5	0.980	1.012													
11.0	1499.6	0.981	1.066													
12.0	1500.4	0.981	1.066													
13.0	1500.0	0.981	0.964													
14.0	1500.4	0.981	0.922													
15.0	1500.4	0.981	0.964													
16.0	1500.0	0.981	0.964													
17.0	1497.8	0.979	0.867													
18.0	1496.3	0.978	0.778													
19.0	1495.2	0.978	0.740													
20.0	1493.7	0.977	0.685													
21.0	1493.0	0.976	0.696													
22.0	1491.6	0.975	0.685													
23.0	1490.5	0.975	0.604													
24.0	1489.4	0.974	0.588													
25.0	1489.0	0.974	0.638													
26.0	1490.1	0.974	0.717													
27.0	1491.2	0.975	0.717													
28.0	1489.7	0.974	0.656													
29.0	1489.4	0.974	0.604													
30.0	1490.5	0.975	0.638													
31.0	1490.5	0.975	0.656													
32.0	1490.1	0.974	0.696													
33.0	1491.2	0.975	0.717													
34.0	1490.8	0.975	0.717													

Cruise: BARTLI 1301-82      Sample: 29-4  
 Position: 15-03N; 69-21W      Date: 10/23/81  
 Calculated for: 23.0 Deg-C      Depth: 3959m  
 0 m 400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Attn. k	% CaCO <sub>3</sub>	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	Kurt
1.0													
2.0													
3.0													
4.0													
5.0													
6.0													
7.0													
8.0													
9.0													
10.0													
11.0													
12.0													
13.0													
14.0													
15.0													
16.0													
17.0													
18.0													
19.0													
20.0													
21.0													
22.0													
23.0													
24.0													
25.0													
26.0													
27.0													
28.0													
29.0													
30.0													
31.0													

Cruise: BARTLT 1301-82      Sample: 29-16  
 Position: 15-03N, 69-21W      Date: 10/23/81  
 Calculated for: 23.0 Deg-C      Depth: 3959m  
                                       0 m      400 kHz

Depth (cm)	vP m/sec	vP Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	N. Kurt
WATER	1530.5	1.001	0.000													
0.0	1528.6	0.999	0.102													
1.0	1502.6	0.962	0.638													
2.0	1498.1	0.980	0.717													
3.0	1496.7	0.979	0.740													
4.0	1498.1	0.980	0.740													
5.0	1503.3	0.983	0.675													
6.0	1498.1	0.980	0.717													
7.0	1495.9	0.978	0.805													
8.0	1495.9	0.978	0.885													
9.0	1495.9	0.978	0.964													
10.0	1497.0	0.979	1.066													
11.0	1496.7	0.979	1.038													
12.0	1496.7	0.979	1.066													
13.0	1497.4	0.979	1.038													
14.0	1497.4	0.979	0.987													
15.0	1497.4	0.979	0.964													
16.0	1497.4	0.979	0.903													
17.0	1497.0	0.979	0.885													
18.0	1495.6	0.978	0.851													
19.0	1495.2	0.978	0.820													
20.0	1493.7	0.977	0.752													
21.0	1492.6	0.976	0.717													
22.0	1490.8	0.975	0.729													
23.0	1490.8	0.975	0.729													
24.0	1489.7	0.974	0.638													
25.0	1489.0	0.974	0.675													
26.0	1489.0	0.974	0.656													
27.0	1489.0	0.974	0.696													
28.0	1487.9	0.973	0.675													
29.0	1486.5	0.972	0.656													
30.0	1486.8	0.972	0.620													
31.0	1486.8	0.972	0.740													

Depth (cm)	VP m/sec	VE Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	1497.4	0.979	0.851													
2.0	1496.3	0.978	0.885													
3.0	1495.9	0.978	0.885													
4.0	1498.5	0.980	0.820													
5.0	1496.7	0.979	0.885													
6.0	1496.3	0.978	0.765													
7.0	1496.7	0.979	0.967													
6.0	1495.9	0.978	0.964													
9.0	1495.9	0.978	1.012													
10.0	1496.7	0.979	1.066													
11.0	1496.7	0.979	1.097													
12.0	1497.8	0.979	1.066													
13.0	1497.8	0.979	1.038													
14.0	1498.9	0.980	0.964													
15.0	1498.1	0.980	0.922													
16.0	1497.4	0.979	0.942													
17.0	1496.7	0.979	0.922													
18.0	1495.6	0.978	0.851													
19.0	1493.7	0.977	0.791													
20.0	1491.2	0.975	0.717													
21.0	1490.1	0.974	0.604													
22.0	1488.6	0.973	0.588													
23.0	1488.6	0.973	0.573													
24.0																
25.0																

Cruise: BARTLT 1301-82      Sample: 30-2  
 Position: 15-09N; 69-34W      Date: 10/23/81  
 Calculated for: 23.0 Deg-C      Depth: 3945m  
                                         0 m    400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	1507.8	0.986	0.964													
2.0	1499.3	0.980	0.964													
3.0	1499.3	0.980	0.942													
4.0	1500.0	0.981	0.964													
5.0	1497.8	0.979	0.964													
6.0	1496.7	0.979	1.012													
7.0	1495.9	0.978	1.066													
8.0	1495.9	0.978	1.012													
9.0	1495.9	0.978	1.038													
10.0	1495.9	0.978	1.066													
11.0	1497.4	0.979	1.038													
12.0	1497.4	0.979	0.964													
13.0	1497.0	0.979	0.903													
14.0	1496.7	0.979	0.942													
15.0	1497.4	0.979	0.885													
16.0	1495.6	0.978	0.885													
17.0	1494.1	0.977	0.820													
18.0	1493.4	0.976	0.805													
19.0	1493.4	0.976	0.740													
20.0	1492.6	0.976	0.706													
21.0	1490.8	0.975	0.656													
22.0	1488.6	0.973	0.588													
23.0	1487.6	0.973	0.558													
24.0	1487.6	0.973	0.620													
25.0	1487.6	0.973	0.675													
26.0	1489.4	0.974	0.696													
27.0	1489.4	0.974	0.696													
28.0	1488.3	0.973	0.604													
29.0	1487.2	0.972	0.588													
30.0	1487.2	0.972	0.638													
31.0	1488.3	0.973	0.696													
32.0	1488.6	0.973	0.675													

Cruise: BARTLF 1301-82      Sample: 30-3  
 Position: 15-09N; 69-34W      Depth: 3945m  
 Calculated for: 23.0      Deg-C      35.00 o/oo      0 m      400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. K	% Por.	% CaCO3	% C	% N	shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	1500.0	0.981	0.765													
2.0	1498.2	0.980	0.820													
3.0	1497.1	0.979	0.885													
4.0	1497.8	0.979	0.885													
5.0	1498.9	0.980	0.964													
6.0	1498.5	0.980	0.964													
7.0	1498.5	0.980	0.964													
8.0	1498.5	0.980	0.964													
9.0	1498.5	0.980	1.038													
10.0	1498.9	0.980	1.066													
11.0	1500.7	0.981	1.097													
12.0	1500.7	0.981	1.038													
13.0	1500.4	0.981	1.012													
14.0	1499.3	0.980	1.038													
15.0	1498.5	0.980	0.987													
16.0	1498.2	0.980	0.964													
17.0	1499.3	0.980	0.942													
18.0	1497.1	0.979	0.885													
19.0	1498.9	0.978	0.820													
20.0	1494.8	0.977	0.765													
21.0	1493.7	0.977	0.696													
22.0	1491.2	0.975	0.675													
23.0	1491.2	0.975	0.638													
24.0	1490.1	0.974	0.604													
25.0	1489.4	0.974	0.638													
26.0	1489.4	0.974	0.675													
27.0	1489.4	0.974	0.638													

Cruise: BARTLT 1301-82  
Position: 15-09N; 69-34W  
Calculated for: 23.0 Deg-C

Date: 10/23/81  
Depth: 3945m  
0 m 400 kHz

Sample: 30-4  
35.00 o/oo

Depth (cm)	Vp m/sec	VP Ratio	Attn. k	% Por.	% CaCO3	% C	% N	Shear Str.	% Sand	% Silt	Mean Clay	Dev Phi	Skew	Kurt	N. Kurt
1.0	1504.4	0.984	0.851												
2.0	1504.1	0.983	1.038												
3.0	1500.0	0.981	0.987												
4.0	1497.0	0.979	0.922												
5.0	1497.4	0.979	0.885												
6.0	1495.6	0.978	0.964												
7.0	1494.5	0.977	1.012												
8.0	1494.5	0.977	1.012												
9.0	1494.5	0.977	1.012												
10.0	1494.8	0.977	0.964												
11.0	1495.2	0.978	1.012												
12.0	1495.6	0.978	0.964												
13.0	1496.7	0.979	0.885												
14.0	1497.0	0.979	0.964												
15.0	1495.2	0.978	0.922												
16.0	1493.7	0.977	0.885												
17.0	1493.4	0.976	0.903												
18.0	1493.4	0.976	0.885												
19.0	1491.6	0.975	0.867												
20.0	1490.5	0.975	0.740												
21.0	1488.6	0.973	0.717												
22.0	1488.6	0.973	0.638												
23.0	1486.8	0.972	0.573												
24.0	1487.2	0.972	0.558												
25.0	1486.1	0.972	0.573												
26.0	1486.1	0.972	0.588												
27.0	1486.8	0.972	0.620												
28.0	1487.6	0.973	0.675												
29.0	1487.2	0.972	0.638												
30.0	1486.8	0.972	0.588												
31.0	1486.5	0.972	0.573												
32.0	1486.5	0.972	0.604												

Cruise: BARTLT 1301-82      Sample: 30-5  
 Position: 15-09N; 62-34W      Depth: 3945m  
 Calculated for: 23.0 Deg-C      0 m      400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1529.3	1.000	-0.015													
0.0	1522.5	0.995	0.177													
1.0	1513.0	0.989	0.376													
2.0	1499.6	0.981	0.660													
3.0	1497.0	0.979	0.725													
4.0	1496.7	0.979	0.776													
5.0	1495.6	0.978	0.790													
6.0	1495.6	0.978	0.835													
7.0	1497.4	0.979	0.852													
8.0	1497.4	0.979	0.927													
9.0	1495.6	0.978	0.972													
10.0	1496.3	0.978	0.996													
11.0	1497.0	0.979	0.949													
12.0	1497.0	0.979	1.023													
13.0	1498.1	0.980	1.023													
14.0	1498.5	0.980	0.972													
15.0	1498.1	0.980	0.949													
16.0	1498.1	0.980	0.907													
17.0	1498.0	0.979	0.888													
18.0	1497.8	0.979	0.949													
19.0	1498.1	0.980	0.869													
20.0	1495.6	0.978	0.835													
21.0	1493.0	0.976	0.750													
22.0	1491.6	0.975	0.681													
23.0	1490.1	0.974	0.641													
24.0	1489.0	0.974	0.605													
25.0	1487.9	0.973	0.605													
26.0	1489.7	0.974	0.573													
27.0	1489.4	0.974	0.573													
28.0	1490.1	0.974	0.660													
29.0	1490.5	0.975	0.660													

Cruise: BARTLT 1301-82  
 Position: 15°09'N; 69°34'W  
 Calculated for: 23.0 Deg-C

Date: 10/23/81  
 Depth: 3945m  
 0 m 400 kHz

Depth (cm)	$V_p$ m/sec	$V_F$ m/sec	Attr. Ratio	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.0	1.000	0.000													
0.0	1526.2	0.998	0.192													
1.0	1507.4	0.986	0.636													
2.0	1495.9	0.978	0.765													
3.0	1495.6	0.978	0.835													
4.0	1495.6	0.978	0.903													
5.0	1494.8	0.977	0.903													15.50
6.0	1494.8	0.977	0.987													
7.0	1495.2	0.978	0.987													29.10
8.0	1495.2	0.978	0.987													
9.0	1495.2	0.978	0.922													
10.0	1495.2	0.978	1.066													
11.0	1495.2	0.978	1.038													
12.0	1496.3	0.978	1.038													
13.0	1497.8	0.979	0.987													
14.0	1498.5	0.980	1.038													
15.0	1497.8	0.979	1.012													
16.0	1497.0	0.979	1.012													
17.0	1497.0	0.979	0.922													
18.0	1496.7	0.979	0.903													
19.0	1495.6	0.978	0.885													
20.0	1493.7	0.977	0.805													
21.0	1491.9	0.976	0.696													
22.0	1490.5	0.975	0.638													
23.0	1489.4	0.974	0.604													29.10
24.0	1488.6	0.973	0.604													
25.0	1488.3	0.973	0.638													31.50
26.0	1488.6	0.973	0.675													
27.0	1488.6	0.973	0.675													
28.0																36.90
29.0																

Cruise: BARTLT 1301-82  
Position: 15-04N; 69-19W  
Calculated for: 23.0 Deg-C

Date: 10/23/81  
Depth: 3949m  
0 m 400 kHz

Sample:

31-1

Depth (cm)	Vp m/sec	Vp/Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.0	1528.9	1.000	0.218													
0.0	1532.0	1.002	0.000													
1.0	1501.8	0.982	0.765													
2.0	1500.7	0.981	0.851													
3.0	1499.6	0.981	0.885													
4.0	1499.6	0.981	0.885													
5.0	1499.6	0.981	0.922													
6.0	1500.7	0.981	0.964													
7.0	1500.7	0.981	1.066													
8.0	1502.6	0.982	1.097													
9.0	1503.3	0.983	1.066													
10.0	1502.6	0.982	1.038													
11.0	1502.2	0.982	0.987													
12.0	1500.7	0.981	0.942													
13.0	1500.7	0.981	0.922													
14.0	1500.0	0.981	0.922													
15.0	1498.9	0.980	0.851													
16.0	1496.7	0.979	0.765													
17.0	1495.6	0.978	0.717													
18.0	1493.4	0.976	0.666													
19.0	1491.9	0.976	0.604													
20.0	1490.8	0.975	0.588													
21.0	1490.8	0.975	0.573													
22.0	1490.8	0.975	0.638													
23.0	1491.2	0.975	0.656													
24.0	1491.2	0.975	0.675													
25.0	1491.2	0.975	0.675													

Cruise: BARTLI 1301-82		Sample: 31-2		Date: 10/23/81	
Position: 15°04N; 69°19W		Depth: 3949m			
Calculated for: 23.0 Deg-C		35.00 o/oo		0 m 400 kHz	
Depth (cm)	v <sub>P</sub> m/sec	v <sub>P</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>
				C	N
WATER	1530.5	1.001	0.000		
0.0	1525.1	0.997	0.370		
1.0	1499.3	0.980	0.765	79.2	
2.0	1496.3	0.978	0.765		
3.0	1495.2	0.978	0.604	76.9	
4.0	1495.2	0.978	0.820		
5.0	1495.6	0.978	0.752	76.7	
6.0	1496.7	0.979	0.820		
7.0	1498.9	0.980	0.835	74.7	
8.0	1498.5	0.980	0.942		
9.0	1497.8	0.979	0.964	73.9	
10.0	1498.9	0.980	1.038		
11.0	1498.9	0.980	1.038		
12.0	1498.9	0.980	1.038		
13.0	1498.5	0.980	0.964		
14.0	1499.3	0.980	0.987		
15.0	1499.3	0.980	0.964		
16.0	1497.4	0.979	0.942		
17.0	1495.6	0.978	0.851		
18.0	1495.2	0.978	0.867		
19.0	1492.3	0.976	0.791		
20.0	1493.4	0.976	0.740		
21.0	1491.9	0.976	0.740		
22.0	1490.8	0.975	0.696		
23.0	1489.4	0.974	0.638		
24.0	1489.4	0.974	0.638		
25.0	1489.0	0.974	0.588		
26.0	1486.8	0.972	0.620		
27.0	1487.6	0.973	0.638		
28.0	1485.4	0.974	0.675		
29.0	1489.0	0.974	0.656		
30.0	1489.0	0.974	0.638		
31.0	1487.9	0.973	0.604		

Cruise: BARTLT 1301-82      Sample: 42-2  
Position: 14-50N, 68-59W      Date: 10/29/81  
Calculated for: 23.0 Deg-C      Depth: 4322m  
                                      0 m    400 kHz

Depth (cm)	$v_p$ m/sec	$v_p$ Attn. $k$	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0														

Cruise: BARTLT 1301-82      Sample: 42-8  
 Position: 14°50'N; 68°59'W      Date: 10/29/81  
 Calculated for: 23.0      Depth: 4322m  
 Deg-C      35.00 σ/oo      0 m      400 kHz

Depth (cm)	Vp m/sec	Vp/ sec Ratio	Attn. K	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	N. Kurt
WATER	1535.0	1.004	0.098												
0.0	1523.9	0.996	0.276												
1.0	1502.2	0.962	0.635												
2.0	1497.4	0.979	0.635												
3.0	1497.8	0.979	0.690												
4.0	1498.9	0.980	0.732												
5.0	1498.5	0.980	0.792												
6.0	1499.2	0.980	0.806												
7.0	1499.2	0.980	0.820												
8.0	1500.0	0.981	0.865												
9.0	1500.3	0.961	0.899												
10.0	1500.3	0.981	0.957												
11.0	1501.1	0.981	0.937												
12.0	1501.8	0.982	0.882												
13.0	1502.2	0.982	0.899												
14.0	1503.3	0.983	0.937												
15.0	1504.0	0.983	0.979												
16.0	1504.6	0.983	0.957												
17.0	1502.6	0.982	0.957												
18.0	1502.9	0.983	0.979												
19.0	1502.6	0.982	0.957												
20.0	1501.1	0.981	0.957												
21.0	1500.7	0.981	0.937												
22.0	1500.0	0.981	0.882												
23.0	1499.6	0.981	0.834												
24.0	1497.0	0.979	0.849												
25.0	1494.8	0.977	0.820												
26.0	1494.1	0.977	0.820												
27.0	1493.0	0.976	0.779												
28.0	1492.6	0.976	0.732												
29.0	1490.5	0.975	0.635												
30.0	1489.4	0.974	0.603												
31.0	1489.0	0.974	0.587												

Cruise: BARTLT 1301-82      Sample: 42-9  
 Position: 14°50'N; 68°59'W      Date: 10/29/81  
 Calculated for: 23.0 Deg-C      Depth: 432.2m  
                                         0 m    400 kHz

Depth (cm)	Vp m/sec	Vp/Vs Ratio	Attn. k	Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1531.9	1.002	0.000													
0.0	1530.4	1.001	0.182													
1.0	1503.7	0.983	0.710													5.40
2.0	1500.0	0.981	0.767													
3.0	1500.0	0.981	0.834													
4.0	1500.0	0.981	0.865													
5.0	1500.0	0.981	0.865													20.80
6.0	1500.0	0.981	0.834													
7.0	1500.0	0.981	0.899													32.70
8.0	1500.0	0.981	0.899													
9.0	1500.0	0.981	0.937													
10.0	1501.4	0.982	0.957													
11.0	1501.4	0.982	0.957													44.60
12.0	1501.4	0.982	0.979													
13.0	1502.6	0.982	0.979													47.00
14.0	1504.4	0.984	1.002													
15.0	1504.4	0.984	1.002													
16.0	1502.6	0.982	0.917													
17.0	1502.6	0.982	0.937													48.20
18.0	1502.6	0.982	1.002													
19.0	1502.2	0.982	0.979													
20.0	1501.1	0.981	0.957													
21.0	1501.8	0.982	0.899													
22.0	1501.1	0.981	0.882													
23.0	1497.4	0.979	0.865													26.80
24.0	1495.9	0.978	0.865													
25.0	1493.4	0.976	0.806													22.60
26.0	1492.3	0.976	0.732													
27.0	1491.2	0.975	0.721													
28.0	1489.7	0.974	0.618													
29.0	1489.7	0.974	0.587													24.40

Cruise: BARTLT 1301-82      Sample: 42-10  
 Position: 14-50N;68-59W      Date: 10/29/81  
 Calculated for: 23.0 Deg-C      Depth: 4322m  
                                   0 m    400 kHz

Depth (cm)	$\nu_p$ m/sec	$\nu_F$ Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	N. Kurt
WATER	1528.1	0.999	0.000													
0.0	1527.3	0.999	0.170													
1.0	1502.6	0.982	0.635													
2.0	1498.9	0.980	0.690													
3.0	1497.8	0.979	0.779													
4.0	1499.2	0.980	0.834													
5.0	1500.0	0.981	0.806													
6.0	1499.6	0.981	0.834													
7.0	1499.2	0.980	0.899													
8.0	1499.2	0.980	0.917													
9.0	1498.5	0.980	0.957													
10.0	1459.2	0.980	1.002													
11.0	1500.7	0.981	0.937													
12.0	1499.2	0.980	0.899													
13.0	1501.4	0.982	0.937													
14.0	1502.2	0.982	1.026													
15.0	1502.2	0.982	0.979													
16.0	1502.2	0.982	0.937													
17.0	1501.8	0.982	0.937													
18.0	1502.6	0.982	1.002													
19.0	1500.3	0.981	1.026													
20.0	1499.2	0.980	0.979													
21.0	1498.5	0.980	0.937													
22.0	1497.8	0.979	0.834													
23.0	1497.0	0.979	0.849													
24.0	1494.5	0.977	0.806													
25.0	1493.7	0.977	0.820													
26.0	1492.3	0.976	0.806													
27.0	1490.5	0.975	0.755													
28.0	1489.7	0.974	0.652													
29.0	1488.3	0.973	0.618													
30.0	1487.6	0.973	0.618													
31.0	1486.8	0.972	0.559													
32.0	1487.2	0.972	0.496													
33.0	1486.1	0.972	0.496													
34.0	1493.0	0.976	0.635													
35.0	1496.3	0.978	0.865													

Cruise: BARTLT 1301-82  
 Position: 14°50'N; 68°59'W  
 Calculated for: 23.0 Deg-C

Sample: 42-11  
 Depth: 4322m  
 0 m 400 kHz  
 0/00

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CACO3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.4	1.001	0.000													
0.0	1515.6	0.991	0.573													
1.0	1500.0	0.981	0.700	81.3	62.50											
2.0	1497.0	0.979	0.792													
3.0	1498.5	0.980	0.849	77.9	63.24											
4.0	1498.1	0.980	0.820													
5.0	1497.4	0.979	0.865	77.0	64.12											
6.0	1497.0	0.979	0.865													
7.0	1497.0	0.979	0.834	76.5	64.66											
8.0	1497.4	0.979	0.899													
9.0	1498.1	0.980	0.957	75.2	63.40											
10.0	1499.6	0.981	1.026													
11.0	1500.7	0.981	1.052	73.5	64.91											
12.0	1501.8	0.982	1.081													
13.0	1502.9	0.983	1.002	72.6	61.82											
14.0	1502.2	0.982	0.979													
15.0	1502.2	0.982	0.979	71.3	61.39											
16.0	1502.9	0.983	0.957													
17.0	1502.6	0.982	0.899	70.5	60.89											
18.0	1499.2	0.980	0.979													
19.0	1499.2	0.980	1.026	70.5	63.27											
20.0	1497.8	0.979	0.882													
21.0	1498.1	0.980	0.834	70.5	60.23											
22.0	1500.0	0.981	0.937													
23.0	1497.4	0.979	0.937	70.7	65.19											
24.0	1496.3	0.978	0.834													
25.0	1489.7	0.974	0.743	72.9	64.50											
26.0	1490.5	0.975	0.732													
27.0	1489.0	0.974	0.721	73.9	65.09											
28.0	1482.0	0.973	0.690													
29.0	1489.7	0.974	0.743	74.5	62.89											
30.0	1489.4	0.974	0.849													
31.0				73.7	62.95											
32.0																
33.0				71.5	62.43											

Cruise: BARTLT 1301-82      Sample: 42-17  
Position: 14-50N; 68-59W      Date: 10/29/81  
Calculated for: 23.0 Deg-C      Depth: 4322m  
0 m 400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N Str.	Shear Modulus G dyn/cm <sup>2</sup>	% Silt	% Sand	Mean Phi	Dev	Skew	Kurt	N. Kurt	
WATER	1530.8	1.001	-0.014													
0.0	1525.1	0.997	0.344													
1.0	1502.6	0.982	0.618													
2.0	1498.5	0.980	0.732													
3.0	1498.9	0.980	0.834													
4.0	1498.5	0.980	0.834													
5.0	1499.6	0.981	0.767													
6.0	1500.7	0.981	0.792													
7.0	1498.9	0.980	0.882													
8.0	1500.7	0.981	0.899													
9.0	1499.2	0.980	0.979													
10.0	1500.7	0.981	0.979													
11.0	1502.2	0.982	0.917													
12.0	1501.8	0.982	0.917													
13.0	1502.6	0.982	0.979													
14.0	1501.8	0.982	0.937													
15.0	1503.3	0.983	0.957													
16.0	1502.6	0.982	0.979													
17.0	1502.6	0.982	0.979													
18.0	1501.1	0.981	0.979													
19.0	1498.9	0.980	0.882													
20.0	1498.9	0.980	0.834													
21.0	1497.8	0.979	0.849													
22.0	1497.8	0.979	0.899													
23.0	1495.6	0.978	0.882													
24.0	1494.1	0.977	0.865													
25.0	1493.0	0.976	0.806													
26.0	1491.9	0.976	0.671													
27.0	1489.7	0.974	0.671													

Cruise: BARTLT 1301-82      Sample: 43-1  
 Position: 14-45N;68-52W  
 Calculated for: 23.0    Deg-C    35.00 d/o

Date: 10/29/81  
 Depth: 4493m  
 0 m    400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. k	% por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1531.2	1.001	-0.014													
0.0	1521.6	0.995	0.292													
1.0	1498.9	0.980	0.546													
2.0	1498.1	0.980	0.618													
3.0	1498.1	0.980	0.635													
4.0	1497.8	0.979	0.603													
5.0	1498.5	0.980	0.603													
6.0	1498.9	0.980	0.603													
7.0	1498.9	0.980	0.690													
8.0	1497.8	0.979	0.690													
9.0	1498.9	0.980	0.710													
10.0	1499.2	0.980	0.755													
11.0	1500.0	0.981	0.755													
12.0	1500.7	0.981	0.671													
13.0	1501.1	0.981	0.767													
14.0	1501.8	0.982	0.865													
15.0	1501.8	0.982	0.820													
16.0	1501.8	0.982	0.767													
17.0	1502.2	0.982	0.834													
18.0	1502.2	0.982	0.849													
19.0	1502.2	0.982	0.899													
20.0	1500.3	0.981	0.834													
21.0	1499.6	0.981	0.806													
22.0	1501.1	0.981	0.806													
23.0	1499.6	0.981	0.732													
24.0	1497.0	0.979	0.755													
25.0	1493.4	0.976	0.671													
26.0	1491.9	0.976	0.618													
27.0	1492.6	0.976	0.618													
28.0	1491.9	0.976	0.652													
29.0	1493.7	0.977	0.690													
30.0	1492.3	0.976	0.690													
31.0	1491.5	0.975	0.635													
32.0	1491.5	0.975	0.671													
33.0	1492.3	0.976	0.710													
34.0	1492.3	0.976	0.710													
35.0	1492.6	0.976	0.834													

Cruise: BARTLT 1301-82  
 Position: 14-45N; 68-52W  
 Calculated for: 23.0 Deg-C

Date: 10/29/81  
 Depth: 4493m  
 0 m 400 kHz

Depth (cm)	$v_p$ m/sec	$v_p$ Ratio	Attn. k	% Por.	Caco3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1531.6	1.001	-0.028													
0.0	1528.9	1.000	0.102													
1.0	1501.1	0.981	0.493													
2.0	1497.8	0.979	0.531													
3.0	1497.8	0.979	0.573													
4.0	1497.8	0.979	0.638													
5.0	1498.9	0.980	0.675													
6.0	1498.9	0.980	0.656													
7.0	1500.0	0.981	0.656													
8.0	1500.0	0.981	0.696													
9.0	1500.3	0.981	0.740													
10.0	1500.3	0.981	0.717													
11.0	1500.3	0.981	0.696													
12.0	1500.7	0.981	0.675													
13.0	1500.7	0.981	0.656													
14.0	1500.3	0.981	0.740													
15.0	1502.2	0.982	0.903													
16.0	1501.8	0.982	0.851													
17.0	1503.3	0.983	0.791													
18.0	1502.9	0.983	0.820													
19.0	1502.9	0.983	0.835													
20.0	1500.7	0.981	0.820													
21.0	1498.9	0.980	0.752													
22.0	1499.6	0.981	0.675													
23.0	1499.6	0.981	0.729													
24.0	1493.4	0.976	0.706													
25.0	1495.2	0.978	0.717													
26.0	1494.8	0.977	0.717													
27.0	1493.4	0.976	0.604													
28.0	1493.4	0.976	0.656													
29.0	1493.7	0.977	0.696													

Cruise: BARTLT 1301-82      Sample: 43-3  
 Position: 14-45N; 68-52W  
 Calculated for: 23.0 Deg-C    35.00 o/oo

Date: 10/29/81  
 Depth: 4493m  
 0 m    400 kHz

Depth (cm)	VP m/sec	Attn. k	VP Ratio	Attn. k	Por.	% Caco3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1531.2	1.001	-0.014														
0.0	1490.1	0.974	0.485														
1.0	1503.3	0.983	0.533														
2.0	1502.2	0.982	0.508														
3.0	1501.1	0.981	0.533														
4.0	1499.2	0.980	0.652														
5.0	1499.2	0.980	0.652														
6.0	1499.2	0.980	0.635														
7.0	1500.0	0.981	0.671														
8.0	1499.6	0.981	0.690														
9.0	1499.2	0.980	0.710														
10.0	1498.5	0.980	0.710														
11.0	1498.5	0.980	0.652														
12.0	1499.6	0.981	0.618														
13.0	1500.3	0.981	0.743														
14.0	1501.8	0.982	0.710														
15.0	1502.2	0.982	0.806														
16.0	1502.2	0.982	0.834														
17.0	1503.7	0.983	0.820														
18.0	1503.3	0.983	0.834														
19.0	1503.7	0.983	0.882														
20.0	1501.8	0.982	0.865														
21.0	1501.8	0.982	0.834														
22.0	1499.2	0.980	0.834														
23.0	1499.2	0.980	0.755														
24.0	1499.2	0.980	0.710														
25.0	1498.9	0.980	0.732														
26.0	1495.9	0.978	0.755														
27.0	1494.5	0.977	0.618														
28.0	1494.5	0.977	0.652														
29.0	1493.0	0.976	0.618														
30.0	1492.6	0.976	0.603														
31.0	1492.3	0.976	0.618														
32.0	1493.7	0.977	0.635														
33.0	1493.7	0.977	0.732														
34.0	1492.3	0.976	0.690														
35.0	1490.5	0.975	0.652														

Cruise: BARTLT 1301-82      Sample: 43-6      Date: 10/29/81  
 Position: 14°45'N; 68°52'W      Depth: 4493m  
 Calculated for: 23.0      Deg-C      35.00 d/oo      0 m      400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1531.2	1.001	-0.014													
0.0	1517.9	0.992	0.292													
1.0	1502.6	0.982	0.485													
2.0	1497.4	0.979	0.573													
3.0	1497.8	0.979	0.618													
4.0	1497.8	0.979	0.635													
5.0	1499.2	0.980	0.652													
6.0	1498.9	0.980	0.690													
7.0	1498.9	0.980	0.710													
8.0	1499.2	0.980	0.710													
9.0	1498.9	0.980	0.732													
10.0	1498.9	0.980	0.710													
11.0	1498.9	0.980	0.671													
12.0	1499.2	0.980	0.690													
13.0	1502.2	0.982	0.820													
14.0	1502.2	0.982	0.849													
15.0	1502.2	0.982	0.779													
16.0	1501.4	0.982	0.779													
17.0	1503.7	0.983	0.865													
18.0	1505.9	0.985	0.899													
19.0	1502.9	0.983	0.865													
20.0	1501.4	0.982	0.806													
21.0	1500.3	0.981	0.710													
22.0	1498.5	0.980	0.732													
23.0	1500.0	0.981	0.806													
24.0	1497.8	0.979	0.792													
25.0	1497.8	0.979	0.820													
26.0	1492.3	0.976	0.779													

Cruise: BARTLT 1301-82      Sample: 43-15  
 Position: 14-45N 68-52W      Date: 10/29/81  
 Calculated for: 23.0 Deg-C      Depth: 4493m  
 0 m 400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1531.6	1.001	0.000													
0.0	1523.2	0.996	0.247	81.5	55.10				45.53	9.25	45.23	6.15	4.36	-0.01	0.58	0.37
1.0	1502.9	0.983	0.499						55.35	7.94	36.34	4.78	4.29	0.68	0.57	0.36
2.0	1498.1	0.980	0.632	78.7	57.14				45.79	10.39	43.82	6.07	4.30	0.03	0.58	0.37
3.0	1497.8	0.979	0.632						46.84	10.15	43.01	6.03	4.32	0.07	0.58	0.37
4.0	1498.1	0.980	0.632						46.20	10.69	43.11	6.01	4.32	0.07	0.58	0.37
5.0	1498.5	0.980	0.666	77.4	56.93				39.73	12.92	47.35	6.57	4.25	-0.16	0.58	0.37
6.0	1497.4	0.979	0.704						32.67	15.00	52.33	6.90	4.07	-0.40	0.58	0.37
7.0	1497.4	0.979	0.666	77.1	58.40				37.89	13.66	48.45	6.66	4.18	-0.22	0.58	0.37
8.0	1498.1	0.980	0.704						35.62	14.93	49.45	6.73	4.03	-0.29	0.58	0.37
9.0	1498.9	0.980	0.746	75.8	58.60				34.07	15.79	50.13	6.87	4.08	-0.28	0.61	0.38
10.0	1498.9	0.980	0.746	74.6	54.39				20.0	1502.6	0.982	72.6	56.40			
11.0	1498.9	0.980	0.724						21.0	1502.6	0.982	0.757				
12.0	1499.2	0.980	0.714						22.0	1499.2	0.982	0.793	71.3	57.81		
13.0	1501.4	0.982	0.820	73.4	55.29				23.0	1501.4	0.982	0.820				
14.0	1501.1	0.981	0.848						24.0	1494.8	0.977	0.793	71.3	57.41		
15.0	1502.6	0.982	0.793	72.6	56.40				25.0	1494.8	0.977	0.757				
16.0	1502.6	0.982	0.757						26.0	1494.1	0.977	0.685				
17.0	1502.6	0.982	0.793						27.0	1494.1	0.977	0.632	72.7	57.78		
18.0	1502.6	0.982	0.820						28.0	1490.5	0.975	0.617				
19.0	1501.8	0.982	0.793	71.3	57.41				29.0	1496.3	0.978	0.820	73.0	58.28		
20.0	1500.3	0.981	0.793						30.0	1494.1	0.977					
21.0	1498.9	0.980	0.781	71.4	57.30				31.0	1494.1	0.977	0.724	71.5	56.36		
22.0	1499.2	0.980	0.757						32.0	1494.1	0.977	0.724				
23.0	1494.1	0.977	0.724						33.0	1494.1	0.977	0.704	72.3	58.65		
24.0	1494.8	0.977	0.704						34.0	1494.8	0.977	0.757				
25.0	1494.8	0.977	0.757						35.0	1494.1	0.977	0.685				
26.0	1494.1	0.977	0.685						36.0	1494.1	0.977	0.632	72.7	57.78		
27.0	1494.1	0.977	0.632						37.0	1490.5	0.975	0.617				
28.0	1490.5	0.975	0.617						38.0	1496.3	0.978	0.820	73.0	58.28		
29.0	1496.3	0.978	0.820						39.0	1494.1	0.977					
30.0	1494.1	0.977							40.0	1494.1	0.977	0.724	71.5	56.36		
31.0	1494.1	0.977							41.0	1494.1	0.977	0.704				

Cruise: BARLT 1301-82      Sample: 43-17      Date: 10/29/81  
 Position: 14-45N; 68-52W      Depth: 4493m  
 Calculated for: 23.0 Deg-C      0 m 400 kHz  
 V<sub>P</sub> Attn. % Shear % Mean Dev Skew Kurt N.  
 Depth V<sub>P</sub> Attn. % Shear % Mean Dev Skew Kurt N.  
 (cm) m/sec K Por. CacCO<sub>3</sub> N Str. Sand Silt Clay Phi Kurt  
 1.0 0.344 0.081

Cruise: BARTLT 1301-82      Sample: 44-3      Date: 10/30/81  
 Position: 14-19N; 68-22W      Depth: 4805m  
 Calculated for: 23.0 Deg-C      0 m      400 kHz  
 Por.      % Attn.      % Shear      % Mean      Skew      Kurt  
 CaCO<sub>3</sub>      C      N      Str.      Sand      Silt      Clay      Phi      N.  
 0.461      0.104

Depth (cm)	V <sub>P</sub> m/sec	Attn. %	CaCO <sub>3</sub> %	N %	Shear Str.	Sand %	Silt %	Clay %	Phi	Kurt N.
1.0										

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1528.9	1.000	0.000													
0.0	1505.9	0.985	0.323													
1.0	1495.6	0.978	0.233													
2.0	1493.7	0.977	0.247													
3.0	1492.3	0.976	0.275													
4.0	1492.3	0.976	0.275													
5.0	1491.9	0.976	0.290													
6.0	1489.4	0.974	0.290													
7.0	1490.8	0.975	0.306													
8.0	1489.7	0.974	0.261													
9.0	1489.4	0.974	0.247													
10.0	1489.4	0.974	0.233													
11.0	1490.8	0.975	0.220													
12.0	1490.1	0.974	0.220													
13.0	1491.2	0.975	0.247													
14.0	1492.3	0.976	0.323													
15.0	1492.6	0.976	0.398													
16.0	1490.8	0.975	0.358													
17.0	1490.8	0.975	0.340													
18.0	1490.8	0.975	0.378													
19.0	1490.8	0.975	0.378													
20.0	1491.9	0.976	0.398													
21.0	1493.4	0.976	0.420													
22.0	1493.4	0.976	0.443													
23.0	1494.5	0.977	0.477													
24.0	1496.3	0.978	0.488													
25.0	1497.0	0.979	0.499													
26.0	1495.9	0.978	0.522													
27.0	1495.9	0.978	0.617													
28.0	1493.0	0.976	0.666													
29.0	1497.8	0.979	0.704													
30.0	1497.8	0.979	0.704													
31.0	1496.3	0.978	0.724													

Cruise: BARTLT 1301-82  
 Position: 14-19N; 68-22W  
 Calculated for: 23.0 Deg-C

Date: 10/30/81  
 Depth: 4805m  
 0 m 400 kHz

Sample: 44-12  
 35.00 d/o

Depth (cm)	VP m/sec	VP Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1531.2	1.001	-0.028													
0.0	1521.7	0.995	0.232													
1.0	1496.7	0.979	0.205	82.7	40.10				26.37	8.75	64.87	7.61	4.25	-0.59	0.68	0.41
2.0	1493.7	0.977	0.218						27.87	9.29	62.84	7.59	4.35	-0.53	0.64	0.39
3.0	1493.7	0.977	0.247	80.5	42.00				28.09	8.39	63.52	7.59	4.26	-0.55	0.64	0.39
4.0	1493.0	0.976	0.247													
5.0	1492.3	0.976	0.247	78.9	40.39				25.60	10.70	63.69	7.59	4.19	-0.53	0.71	0.41
6.0	1491.2	0.975	0.247						24.46	9.86	65.69	7.77	4.26	-0.51	0.80	0.45
7.0	1491.2	0.975	0.232	78.1	39.32											
8.0	1490.8	0.975	0.218													
9.0	1490.8	0.975	0.218	77.4	38.56											
10.0	1490.8	0.975	0.218						17.40	11.27	71.33	8.43	3.87	-0.53	1.37	0.58
11.0	1490.8	0.975	0.192	76.0	34.45				19.55	10.91	69.55	8.10	4.01	-0.57	1.27	0.56
12.0	1490.8	0.975	0.167						23.01	11.19	65.80	7.86	4.26	-0.52	0.91	0.48
13.0	1491.6	0.975	0.262	75.1	36.65				24.85	11.07	64.08	7.80	4.28	-0.53	0.74	0.43
14.0	1491.9	0.976	0.312						20.96	11.50	67.54	7.81	3.91	-0.64	1.06	0.52
15.0	1492.6	0.976	0.349	74.7	41.62				23.70	11.85	64.44	7.69	4.09	-0.57	0.87	0.46
16.0	1492.6	0.976	0.349						26.73	11.64	61.64	7.44	4.04	-0.56	0.67	0.40
17.0	1493.4	0.976	0.349	74.4	40.94											
18.0	1493.7	0.977	0.312													
19.0	1493.7	0.977	0.349	74.0	41.09											
20.0	1494.8	0.977	0.370													
21.0	1494.8	0.977	0.391	74.1	42.57											
22.0	1495.2	0.978	0.419													
23.0	1496.3	0.978	0.449	73.6	44.73											
24.0	1497.0	0.979	0.482													
25.0	1498.9	0.980	0.518	73.2	44.35											
26.0	1496.7	0.979	0.518													
27.0	1498.5	0.980	0.544	72.7	46.51											
28.0	1499.6	0.981	0.604													
29.0	1499.6	0.981	0.588	72.8	48.89											
30.0	1499.6	0.981	0.675	72.6	49.63											
31.0	1498.5	0.980	0.675													
32.0																
33.0																
34.0																
35.0																

Cruise: BARTLT 1301-82		Sample: 44-13		Date: 10/30/81	
Position: 14-19N; 68-22W		d/oo		Depth: 4805m	
Calculated for: 23.0 Deg-C		0 m 400 kHz		0 m 400 kHz	
Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% For.	% Caco3
WATER	1532.4	1.002	-0.014		
0.0	1526.3	0.998	0.170		
1.0	1498.9	0.980	0.276		
2.0	1495.2	0.978	0.292		
3.0	1493.7	0.977	0.309		
4.0	1493.7	0.977	0.292		
5.0	1492.6	0.976	0.292		
6.0	1491.6	0.975	0.276		
7.0	1492.3	0.976	0.261		
8.0	1490.5	0.975	0.276		
9.0	1490.8	0.975	0.247		
10.0	1490.1	0.974	0.219		
11.0	1490.1	0.974	0.219		
12.0	1491.2	0.975	0.182		
13.0	1491.6	0.975	0.170		
14.0	1491.6	0.975	0.247		
15.0	1493.4	0.976	0.309		
16.0	1493.7	0.977	0.364		
17.0	1494.8	0.977	0.364		
18.0	1493.7	0.977	0.309		
19.0	1494.5	0.977	0.326		
20.0	1496.3	0.978	0.364		
21.0	1496.7	0.979	0.364		
22.0	1496.7	0.979	0.406		
23.0	1498.1	0.980	0.433		
24.0	1498.1	0.980	0.453		
25.0	1498.9	0.980	0.463		
26.0	1499.3	0.980	0.508		
27.0					
28.0					
29.0					

Cruise: BARTLT 1301-82  
 Position: 14-19N; 68-22W  
 Calculated for: 23.0 Deg-C

Date: 10/30/81  
 Depth: 4805m  
 0 m 400 kHz

Sample: 44-14  
 35.00 .0/oo

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N.	Kurt
WATER	1532.0	1.002	0.000														
0.0	1517.5	0.992	0.261														
1.0	1495.2	0.978	0.247														
2.0	1493.4	0.976	0.261														
3.0	1493.4	0.976	0.276														
4.0	1492.6	0.976	0.261														
5.0	1492.6	0.976	0.261														
6.0	1492.6	0.976	0.261														
7.0	1492.6	0.976	0.261														
8.0	1492.3	0.976	0.247														
9.0	1491.9	0.976	0.233														
10.0	1491.6	0.975	0.219														
11.0	1491.9	0.976	0.219														
12.0	1491.9	0.976	0.206														
13.0	1493.0	0.976	0.292														
14.0	1494.8	0.977	0.344														
15.0	1494.8	0.977	0.364														
16.0	1494.8	0.977	0.364														
17.0	1494.5	0.977	0.364														
18.0	1495.2	0.978	0.344														
19.0	1495.2	0.978	0.344														
20.0	1496.7	0.979	0.453														
21.0	1498.1	0.980	0.443														
22.0	1498.1	0.980	0.443														
23.0	1498.9	0.980	0.474														
24.0	1498.9	0.980	0.485														
25.0	1499.3	0.980	0.474														
26.0	1501.5	0.982	0.587														
27.0	1502.6	0.982	0.635														
28.0															47.60		
29.0																	
30.0															53.50		
31.0																	

Cruise: BART/T 1301-82      Sample: 47-1  
 Position: 13°4'4"N; 67°48'W  
 Calculated for: 23.0      Deg-C      35.00 o/oo

Depth (cm)	VP m/sec	VP Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
32.0	1505.0	0.984	0.233													
33.0	1503.1	0.983	0.159													
34.0	1540.7	1.007	0.603													
35.0	1533.3	1.003	0.559													
36.0	1523.4	0.996	0.485													

Cruise: EAKILI 1201-82      Sample: 47-2  
 Position: 13-44N; 67-48W      Date: 11/01/81  
 Calculated lon: 23.6      Depth: 5049m  
 Deg-C      35.00 o/oo      0 m      400 kHz

Depth (cm)	v <sub>f</sub> m/sec	v <sub>f</sub> Ratio	Attn. K	% por.	CaCO <sub>3</sub>	% C	% K	Shear Str.	% S	Mean Sana	% Silt	Clay	% Phi	Dev	Skew	Kurt	N. Kurt
32.0	1498.0	0.979	0.098							50.98							
33.0	1498.0	0.979	0.098														
34.0	1497.2	0.979	0.098														
35.0	1507.2	0.985	0.261														
36.0	1539.5	1.007	0.429														

Cruise: BARTLT 1301-82		Sample: 48-3		Date: 11/01/81
Position: 13-44N; 67-48W		Deg-C 35.00 o/oo		Depth: 5049m
Calculated for: 23.0				0 m 400 kHz
Depth (cm)	VP m/sec	VP Ratio	Attn. k	% Por. CaCO <sub>3</sub>
1.0	1499.1	0.980	0.167	
2.0	1494.3	0.977	0.123	
3.0	1493.9	0.977	0.144	
4.0	1491.7	0.975	0.123	
5.0	1489.9	0.974	0.102	
6.0	1489.6	0.974	0.083	
7.0	1489.9	0.974	0.083	
8.0	1491.0	0.975	0.065	
9.0	1491.0	0.975	0.065	
10.0	1492.8	0.976	0.056	
11.0	1501.6	0.982	0.123	
12.0	1503.8	0.983	0.144	
13.0	1507.9	0.986	0.144	
14.0	1511.3	0.988	0.247	
15.0	1517.3	0.992	0.471	
16.0	1536.0	1.004	0.471	
17.0	1537.1	1.005	0.482	
18.0	1527.5	0.999	0.391	
19.0	1540.6	1.007	0.851	
20.0	1563.5	1.022	0.942	
21.0	1543.3	1.009	0.518	
22.0	1497.6	0.979	0.752	
23.0	1488.5	0.973	0.083	
24.0	1487.4	0.973	0.065	
25.0	1487.4	0.973	0.083	
26.0	1487.7	0.973	0.056	
27.0	1488.8	0.973	0.048	
28.0	1491.7	0.975	0.048	
29.0	1495.7	0.978	0.048	
30.0	1505.0	0.984	0.102	
31.0	1501.3	0.982	0.083	
32.0	1498.3	0.989	0.083	
33.0	1502.7	0.983	0.167	

Cruise: BARTLT 1301-82      Sample: 48-4  
 Position: 13-44N; 67-48W  
 Calculated for: 23.0 Deg-C      35.00 o/oo

Date: 11/01/81  
 Depth: 5049m  
 0 m 400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N.
1.0	1506.8	0.985	0.330													
2.0	1502.7	0.983	0.294													8.32
3.0	1496.5	0.978	0.232													
4.0	1493.2	0.976	0.167													13.53
5.0	1490.6	0.975	0.144													
6.0	1489.9	0.974	0.123													33.30
7.0	1489.6	0.974	0.112													
8.0	1489.9	0.974	0.112													45.79
9.0	1490.6	0.975	0.093													
10.0	1491.0	0.975	0.102													174.82
11.0	1494.7	0.977	0.112													
12.0	1506.8	0.985	0.218													
13.0	1506.1	0.985	0.144													
14.0	1514.3	0.990	0.218													
15.0	1514.7	0.990	0.391													
16.0	1506.4	0.985	0.312													
17.0	1519.5	0.994	0.439													
18.0	1548.0	1.012	0.696													
19.0	1572.7	1.028	0.696													
20.0	1552.7	1.015	0.740													
21.0	1531.3	1.001	0.588													
22.0	1490.3	0.974	0.330													
23.0	1486.7	0.972	0.083													
24.0	1485.6	0.971	0.093													
25.0	1485.2	0.971	0.093													
26.0	1486.3	0.972	0.065													
27.0	1487.4	0.973	0.056													
28.0	1489.6	0.974	0.048													
29.0	1492.1	0.976	0.048													
30.0	1492.1	0.976	0.048													
31.0	1503.1	0.983	0.102													
32.0	1506.4	0.985	0.093													
33.0	1494.3	0.977	0.074													

Depth (cm)	Vp m/sec	Vp Ratio	Attr. k	% Por.	% CaCO3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
15.0	1525.2	0.997	0.391													
16.0	1520.7	0.994	0.391													
17.0	1520.3	0.994	0.391													
18.0	1521.1	0.995	0.370													
19.0	1529.4	1.000	0.439													
20.0	1541.8	1.008	0.604													
21.0	1553.9	1.016	0.573													
22.0	1544.9	1.010	0.531													
23.0	1541.8	1.008	0.588													
24.0	1554.7	1.017	1.066													
25.0	1499.8	0.981	1.066													
26.0	1493.2	0.976	0.278													
27.0	1486.3	0.972	0.074													
28.0	1485.9	0.972	0.065													
29.0	1485.9	0.972	0.065													
30.0	1486.7	0.972	0.048													
31.0	1488.1	0.973	0.031													
32.0	1493.2	0.976	0.048													
33.0	1503.1	0.983	0.123													

Cruise: BARTLT 1301-82      Sample: 48-6  
 Position: 13-44N; 67-48W      Date: 11/01/81  
 Calculated for: 23.0 Deg-C      Depth: 504.9m  
 0 m 400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	Kurt
15.0	1534.8	1.004	0.312													
16.0	1529.8	1.000	0.391													
17.0	1529.8	1.000	0.391													
18.0	1533.3	1.003	0.429													
19.0	1543.3	1.009	0.482													
20.0	1555.9	1.017	0.638													
21.0	1588.2	1.038	0.922													
22.0	1601.1	1.047	0.922													
23.0	1571.5	1.028	0.851													
24.0	1492.8	0.976	0.370													
25.0	1485.9	0.972	0.065													
26.0	1485.9	0.972	0.056													
27.0	1487.4	0.973	0.083													
28.0	1486.3	0.972	0.048													
29.0	1487.7	0.973	0.048													
30.0	1488.1	0.973	0.048													
31.0	1493.2	0.976	0.048													
32.0	1504.2	0.984	0.144													

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
15.0	1533.7	1.003	0.531													
16.0	1528.7	1.000	0.439													9.37
17.0	1526.0	0.998	0.391													
18.0	1522.2	0.995	0.349													6.24
19.0	1522.2	0.995	0.349													
20.0	1527.9	0.999	0.471													10.41
21.0	1555.9	1.017	0.740													
22.0	1545.7	1.011	0.647													15.61
23.0	1544.9	1.010	0.604													
24.0	1539.4	1.007	0.885													14.57
25.0	1488.8	0.973	0.102													
26.0	1487.0	0.972	0.056													14.57
27.0	1486.7	0.972	0.065													
28.0	1486.7	0.972	0.056													19.77
29.0	1487.0	0.972	0.048													
30.0	1487.7	0.973	0.048													78.88
31.0	1491.0	0.975	0.048													
32.0	1509.4	0.987	0.218													126.95
33.0	1505.3	0.984	0.102													
34.0	1496.8	0.979	0.074													32.25
35.0	1495.0	0.978	0.102													
36.0	1493.6	0.977	0.133													36.42

Cruise: BARTLT 1301-82      Sample: 48-8  
 Position: 13°44'N; 67°48'W      Date: 11/01/81  
 Calculated for: 23.0 Deg-C      Depth: 5049m  
 0 m      400 kHz

Cruise: BARTLT 1301-82      Sample: 48-9      Date: 11/01/81  
Position: 13-44N; 67-48W      Depth: 5049m  
Calculated for: 23.0 Deg-C      0 m 400 kHz

Cruise: BARTLT 1301-82      Sample: 48-9      Date: 11/01/81  
 Position: 13-44N; 67-48W      Depth: 5049m  
 Calculated for: 23.0 Deg-C      0 m 400 kHz

Cruise: BARTLT 1301-82      Sample: 48-9      Date: 11/01/81  
 Position: 13-44N; 67-48W      Depth: 5049m  
 Calculated for: 23.0 Deg-C      0 m 400 kHz

Cruise: BARTLT 1301-82      Sample: 48-8  
Position: 13-44N; 67-48W  
Calculated for: 23.0 Deg-C    35.00 σ/ω

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Attn. Ratio	% Por.	CACO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	Mean Clay	Dev Phi	Skew	Kurt	N.	Kurt
35.0	1513.6	0.990	0.717												
36.0	1506.1	0.985	0.638												
37.0	1531.4	1.001	0.740												

Cruise: BARFELT 1301-82  
Position: 13-44N; 67-48W  
Calculated for: 23.0 Deg-C

Date: 11/01/81  
Depth: 5049m  
0 m 400 kHz

Sample: 48-9

Depth (cm)	v <sub>P</sub> m/sec	v <sub>P</sub> Ratio	Attn. %	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
33.0	1496.5	0.978	1.458													
34.0	1499.1	0.980	0.294													15.61
35.0	1493.6	0.977	0.093													
36.0	1500.5	0.981	0.414													34.34
37.0																54.11
38.0																
39.0																

Cruise: BARTLT 1301-82      Sample: 51-3  
 Position: 13-44N; 67-48W      Date: 11/02/81  
 Calculated for: 23.0 Deg-C      Depth: 5049m  
 0 m 400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1528.6	0.999	0.000													
0.0	1523.2	0.996	0.065	0.112	85.5	7.38										
1.0	1498.5	0.980	0.083	0.083	82.8	7.38										
2.0	1493.0	0.976	0.093	0.093	80.9	6.29										
3.0	1490.8	0.975	0.083	0.083	79.4	5.17										
4.0	1491.6	0.975	0.093	0.093	78.9	4.40										
5.0	1489.4	0.974	0.093	0.093	78.4	4.40										
6.0	1488.6	0.973	0.083	0.083	77.9	3.17										
7.0	1486.8	0.972	0.065	0.065	77.4	3.17										
8.0	1486.8	0.972	0.056	0.056	76.9	3.17										
9.0	1486.5	0.972	0.056	0.056	76.4	3.17										
10.0	1487.9	0.973	0.065	0.065	75.9	4.04										
11.0	1489.0	0.974	0.083	0.083	75.4	4.04										
12.0	1491.2	0.975	0.093	0.093	74.9	2.77										
13.0	1496.7	0.979	0.123	0.123	74.4	2.77										
13.5					74.9	3.85										
14.0	1499.3	0.980	0.167	0.167	74.4	4.43										
14.5	1505.9	0.985	0.439	0.439	74.4	4.43										
15.0	1528.6	0.999	0.820	0.820	74.4	4.43										

Cruise: BARTLT 1301-82      Sample: 51-4  
 Position: 13-44N; 67-48W  
 Calculated tot: 23.0      Deg-C      35.00 d/o

Date: 11/02/81  
 Depth: 5049m  
 0 m      400 kHz

Depth (cm)	V <sub>F</sub> m/sec	V <sub>F</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N.	Kurt
WATER	1528	.5	0.999	0.000													
0.0	1514	.9	0.991	0.131													
1.0	1497	.8	0.979	0.112													2.08
2.0	1495	.6	0.978	0.112													4.16
3.0	1493	.7	0.977	0.112													
4.0	1492	.3	0.976	0.112													
5.0	1490	.5	0.975	0.112													9.37
6.0	1489	.0	0.974	0.112													
7.0	1487	.6	0.973	0.093													15.61
8.0	1486	.5	0.972	0.085													
9.0	1486	.6	0.972	0.085													13.53
10.0	1487	.2	0.972	0.093													
11.0	1488	.3	0.973	0.085													12.49
12.0	1488	.6	0.973	0.093													
13.0	1489	.7	0.974	0.102													
14.0	1492	.3	0.976	0.102													65.56
15.0	1496	.3	0.978	0.121													
16.0	1497	.8	0.979	0.173													
17.0	1498	.5	0.980	0.290													
18.0	1513	.7	0.990	0.724													
19.0	1500	.4	0.981	1.160													

Cruise: BARTLT 1301-82      Sample: 51-5  
 Position: 13-4N; 67-48W  
 Calculated for: 23.0      Deg-C      35.00 σ/oo

Depth (cm)	VP m/sec	VP Ratio	Attu. k	% Pcr.	% CaCO <sub>3</sub>	% C	% N	% Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
14.0	1519.0	0.993	0.262						3.66	61.66	35.28	7.39	2.73	0.47	0.90	0.47
15.0	1517.5	0.992	0.247	75.4	4.88				6.11	54.86	39.03	7.51	2.91	0.35	0.80	0.44
16.0	1517.9	0.992	0.247													
17.0	1518.7	0.993	0.278	79.0	5.41											
18.0	1535.5	1.004	0.192						2.05	75.33	22.62	6.78	2.41	0.59	1.28	0.56
19.0	1549.5	1.013	0.192	64.6	5.52											
20.0	1539.4	1.007	0.205						4.38	65.08	30.55	7.01	2.69	0.56	0.86	0.46
21.0	1525.9	0.998	0.370	66.9	3.96											
22.0	1525.1	0.997	0.349						3.17	68.70	28.13	7.00	2.66	0.59	0.96	0.49
23.0	1524.7	0.997	0.312	69.4	6.18											
24.0	1526.3	0.998	0.349						2.59	73.94	23.47	6.74	2.57	0.60	1.18	0.54
25.0	1594.5	1.043	0.391	66.7	5.09											
26.0	1551.1	1.014	0.604						2.30	80.50	17.19	6.10	2.04	0.56	1.71	0.63
27.0	1569.9	1.026	0.740	59.5	5.17											
28.0	1516.8	0.992	0.429						2.16	75.05	22.79	6.64	2.59	0.64	1.21	0.55
29.0	1515.3	0.991	0.604	65.2	6.17											
30.0	1487.9	0.973	0.133						0.46	20.35	79.19	9.88	2.18	-0.17	1.12	0.53
31.0	1485.4	0.971	0.065	80.3	4.61											
32.0	1483.9	0.970	0.074						0.11	20.89	79.00	10.06	2.32	-0.10	0.92	0.48
33.0	1484.3	0.971	0.074	79.5	5.26											
34.0	1484.7	0.971	0.056						0.58	20.36	79.06	9.96	2.27	-0.14	1.03	0.51
35.0	1486.1	0.972	0.048	79.2	6.15											
36.0	1487.6	0.973	0.031						0.00	21.36	78.64	10.06	2.33	-0.08	0.89	0.47
37.0	1492.6	0.976	0.048	73.3	3.33											
38.0	1501.8	0.982	0.102						0.00	25.41	74.59	9.70	2.28	-0.14	1.00	0.50
39.0	1500.7	0.981	0.167	68.3	1.67											
40.0									0.11	34.02	65.87	9.36	2.67	0.00	0.84	0.46
41.0				75.9	2.82											

Cruise: BARTLT 1301-82  
 Position: 13-44N; 67-48W  
 Calculated for: 23.0 Deg-C

Date: 11/02/81  
 Depth: 5049m  
 0 m 400 kHz

Sample: 51-7  
 35.00 o/oo

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	CaCO <sub>3</sub> %	C %	N %	Shear Str.	% Sand	% Silt	Mean Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
16.0	1494.8	0.977	0.206													
17.0	1507.8	0.986	0.508													
18.0	1516.4	0.991	0.474													13.53
19.0	1516.4	0.991	0.424													
20.0	1519.4	0.993	0.453													16.65
21.0	1525.5	0.997	0.463													
22.0	1530.4	1.001	0.485													10.41
23.0	1533.1	1.002	0.533													
24.0	1521.3	0.995	0.364													10.41
25.0	1519.4	0.993	0.276													
26.0	1532.4	1.002	0.587													17.96
27.0	1554.6	1.016	0.652													
28.0	1557.0	1.018	0.587													14.57
29.0	1586.1	1.037	0.792													
30.0	1488.6	0.973	0.117													10.41
31.0	1486.5	0.972	0.079													
32.0	1485.7	0.971	0.079													12.49
33.0	1485.7	0.971	0.071													
34.0	1486.5	0.972	0.062													27.06
35.0	1486.8	0.972	0.046													
36.0	1495.9	0.978	0.079													105.10
37.0	1510.4	0.988	0.219													
38.0	1501.1	0.981	0.117													55.16
39.0	1491.9	0.976	0.098													20.81

Cruise: BARTLT 1301-82      Sample: 53-16      Date: 11/03/81  
 Position: 13-47N;67-47W      Depth: 5049m  
 Calculated for: 23.0 Deg-C      0 m      400 kHz

Cruise: BARTLT 1301-82		Sample: 53-18		Date: 11/03/81	
Position: 13-47N; 67-47W				Depth: 5049m	
Calculated for: 23.0		Deg-C	35.00	q/o/o	0 m 400 kHz
Depth (cm)	v <sub>F</sub> m/sec	v <sub>F</sub> Ratio	Attn. k	% CaCO <sub>3</sub>	% C N
WATER	1530.0	1.000	0.000		
0.0	1521.5	0.995	0.102		
1.0	1499.4	0.980	0.102		
2.0	1492.8	0.976	0.093		
3.0	1489.9	0.974	0.093		
4.0	1488.6	0.973	0.093		
5.0	1487.0	0.972	0.083		
6.0	1486.6	0.972	0.083		
7.0	1485.9	0.972	0.083		
8.0	1485.5	0.971	0.083		
9.0	1486.6	0.972	0.074		
10.0	1486.6	0.972	0.065		
11.0	1488.1	0.973	0.065		
12.0	1489.5	0.974	0.065		
13.0	1491.0	0.975	0.074		
14.0	1494.3	0.977	0.083		
15.0	1493.5	0.977	0.093		
16.0	1492.8	0.976	0.123		
17.0	1492.4	0.976	0.167		
18.0	1504.2	0.984	0.370		
19.0	1514.3	0.990	0.638		

Cruise: BARTLT 1301-82      Sample: 53-19  
 Position: 13-47N; 67-47W  
 Calculated for: 23.0      Deg-C      35.00 σ/oo

Depth (cm)	vF m/sec	vF Ratio	Attr. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.2	1.001	-0.015													
0.0	1525.6	0.998	0.083													
1.0	1500.1	0.981	0.102	85.9	6.46											
2.0	1495.0	0.978	0.083													
3.0	1493.2	0.976	0.093	83.3	6.57											
4.0	1492.1	0.976	0.083													
5.0	1489.9	0.974	0.083	81.1	5.43											
6.0	1489.2	0.974	0.074													
7.0	1488.1	0.973	0.065	79.5	3.85											
8.0	1487.3	0.973	0.056													
9.0	1488.1	0.973	0.048	74.8	3.07											
10.0	1489.9	0.974	0.048													
11.0	1490.3	0.974	0.048	71.3	2.42											
12.0	1492.4	0.976	0.048													
13.0	1501.2	0.982	0.083	70.8	2.05											
14.0	1501.2	0.982	0.102													
15.0	1497.2	0.979	0.167	75.2	4.17											
16.0	1497.2	0.979	0.262													
17.0	1487.7	0.973	0.102													
18.0	1486.3	0.972	0.065													
19.0	1486.6	0.972	0.048													
20.0	1487.0	0.972	0.031													
21.0	1491.3	0.975	0.048													
22.0	1499.0	0.980	0.083													
23.0	1496.8	0.979	0.065													
24.0	1492.1	0.976	0.102													

Cruise: BARTLT 1301-82      Sample: 53-20      Date: 11/03/81  
 Position: 13-47N;67-47W      Depth: 5049m  
 Calculated for: 23.0 Deg-C      0 m      400 kHz

Sample: 53-20

Cruise: BARTLT 1301-82      Sample: 53-21  
 Position: 13-47N; 67-47W      Date: 11/03/81  
 Calculated for: 23.0 Deg-C      Depth: 5049m  
                                   0 m    400 kHz

Depth (cm)	vP m/sec	vP Ratio	Attn. k	% POR.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt	
14.0	1526.4	0.998	0.638									0.71	69.23	30.06	7.41	2.44	
15.0	1524.5	0.997	0.493	64.0	2.92								1.28	63.62	35.10	7.55	2.54
16.0	1515.4	0.991	0.419										3.03	58.54	38.42	7.61	2.76
17.0	1510.2	0.987	0.312	68.0	3.55								4.24	64.79	30.97	7.16	2.61
18.0	1512.8	0.989	0.312										1.19	82.41	16.40	6.24	1.85
19.0	1514.7	0.990	0.330	72.9	4.33								3.49	75.59	20.93	6.59	2.41
20.0	1515.8	0.991	0.312										2.37	74.72	22.91	6.66	2.51
21.0	1517.7	0.992	0.312	73.1	4.50								0.43	22.14	77.43	9.92	2.31
22.0	1524.9	0.997	0.429										0.26	20.80	78.95	10.05	2.31
23.0	1554.0	1.016	0.791	58.5	4.30								0.10	22.72	77.18	10.00	2.37
24.0	1550.8	1.014	0.805										0.09	21.06	78.85	9.96	2.26
25.0	1541.4	1.008	0.740	62.8	5.06								0.00	24.45	75.55	9.84	2.30
26.0	1533.3	1.003	0.706														
27.0	1540.7	1.007	0.729	61.0	5.04												
28.0	1494.3	0.977	0.382														
29.0	1487.7	0.973	0.074	79.8	4.44												
30.0	1487.0	0.972	0.065														
31.0	1487.0	0.972	0.065	78.7	5.83												
32.0	1487.3	0.973	0.056														
33.0	1489.5	0.974	0.093	76.6	3.72												
34.0	1493.2	0.976	0.218														
35.0	1497.2	0.979	0.330	74.0	2.26												
36.0				73.1	2.05												
37.0																	

Cruise: BARTLT 1301-82  
 Position: 13-43N; 67-44W  
 Calculated for: 23.0 Deg-C

Date: 11/03/81  
 Depth: 5052m  
 0 m 400 kHz

Depth (cm.)	V <sub>F</sub> m/sec	V <sub>F</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
20.0	1507.0	0.985	1.012													
21.0	1502.9	0.983	0.192													
22.0	1514.1	0.990	0.278													
23.0	1540.5	1.007	0.558													
24.0	1558.2	1.019	0.518													
25.0	1553.4	1.016	0.531													
26.0	1559.0	1.019	0.604													
27.0	1603.2	1.048	0.820													
28.0	1562.2	1.021	0.604													
29.0	1566.6	1.024	0.656													
30.0	1607.0	1.051	0.765													
31.0	1584.9	1.036	0.717													
32.0	1492.6	0.976	0.409													
33.0	1485.0	0.971	0.065													
34.0	1485.0	0.971	0.048													
35.0	1484.7	0.971	0.048													
36.0	1484.7	0.971	0.048													
37.0	1484.7	0.971	0.048													
38.0	1486.8	0.972	0.031													
39.0	1488.6	0.973	0.031													
40.0	1491.2	0.975	0.031													
41.0	1499.6	0.961	0.102													
42.0	1501.1	0.981	0.123													
43.0																
44.0																
45.0																

Cruise: BARTLT 1301-82      Sample: 54-2      Date: 11/03/81  
 Position: 13-43N; 67-44W      Depth: 5052m  
 Calculated for: 23.0 Deg-C      0 m 400 kHz

Cruise: BARTLT 1301-82      Sample: 54-3  
Position: 13-43N; 67-44W      Date: 11/03/81  
Calculated for: 23.0      Depth: 5052m  
                                        0 m      400 kHz

Depth (cm)	V <sub>p</sub> m/sec	V <sub>p</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
16.0																
17.0																
18.0																
19.0																
20.0																
21.0																
22.0																
23.0																
24.0																
25.0																
26.0																
27.0																
28.0																
29.0																
30.0																
31.0																
32.0																
33.0																
34.0																
35.0																
36.0																

Cruise: BARTLT 1301-82      Sample: 54-4  
 Position: 13-43N; 67-44W      Date: 11/03/81  
 Calculated for: 23.0 Deg-C      Depth: 505.2m  
 0 m 400 kHz

Depth (cm)	vF m/sec	VP Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.5	1.001	-0.015													
0.0	1525.5	0.997	0.065													
1.0	1504.4	0.984	0.144	85.7	5.23											
2.0	1495.6	0.978	0.144													
3.0	1492.6	0.975	0.123	81.8	4.99											
4.0	1490.8	0.975	0.102													
5.0	1489.7	0.974	0.093	81.1	5.68											
6.0	1487.9	0.973	0.083													
7.0	1487.6	0.973	0.065	78.2	3.39											
8.0	1488.6	0.973	0.048													
9.0	1489.7	0.974	0.048	74.4	3.41											
10.0	1489.4	0.974	0.048													
11.0	1488.3	0.973	0.048	73.0	3.40											
12.0	1488.3	0.973	0.031													
13.0	1487.6	0.973	0.048	74.5	3.44											
14.0	1486.1	0.972	0.048													
15.0	1486.1	0.972	0.048	74.2	2.94											
16.0	1488.6	0.973	0.065													
17.0	1495.6	0.978	0.123	68.3	2.50											
18.0	1503.3	0.983	0.144													
19.0	1507.8	0.986	0.167	68.7	2.41											
20.0	1504.1	0.983	0.144													
21.0	1502.6	0.982	0.156	64.8	3.01											
22.0	1511.9	0.989	0.370													
23.0	1535.5	1.004	0.696													
24.0	1547.6	1.012	0.675													
25.0	1560.6	1.020	0.675													
26.0	1561.4	1.021	0.409													
27.0	1585.0	1.036	0.056													
28.0	1579.6	1.033	0.102													

Cruise: BARTLT 1301-82		Sample: 54-5		Date: 11/3/81	
Position: 13-43N; 67-44W				Depth: 5052m	
Calculated for: 23.0 Deg-C		35.00 o/oo		0 m 400 kHz	
Depth (cm)	Vp m/sec	VP Ratio	Attn. k	% Por.	% CaCO3
WATER	1530.1	1.000	0.000		
0.0	1525.9	0.998	0.031		
1.0	1501.8	0.982	0.123		
2.0	1493.0	0.976	0.102		
3.0	1488.6	0.973	0.083		
4.0	1487.6	0.973	0.083		
5.0	1488.6	0.973	0.083		
6.0	1486.5	0.972	0.074		
7.0	1486.5	0.972	0.065		
8.0	1487.9	0.973	0.048		
9.0	1488.6	0.973	0.048		
10.0	1488.6	0.973	0.031		
11.0	1488.6	0.973	0.048		
12.0	1488.3	0.973	0.048		
13.0	1486.5	0.972	0.048		
14.0	1485.7	0.971	0.065		
15.0	1486.5	0.972	0.048		
16.0	1487.6	0.973	0.048		
17.0	1489.4	0.974	0.048		
18.0	1494.1	0.977	0.123		
19.0	1517.5	0.992	0.439		
20.0	1529.3	1.000	0.414		
21.0	1520.6	0.994	0.391		
22.0	1508.9	0.987	0.312		
23.0	1518.7	0.993	0.506		
24.0	1538.6	1.006	0.573		
25.0	1542.1	1.008	0.573		
26.0	1566.2	1.024	1.066		
27.0	1579.6	1.033	0.123		
28.0	1581.3	1.034	0.192		

Cruise: BARTLT 1301-82      Sample: 54-6  
Position: 13-43N; 67-44W      Date: 11/3/81  
Calculated for: 23.0 Deg-C      Depth: 5052m  
                                      0 m 400 kHz

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	Mean Clay	Dev Phi	Skew	Kurt	N. Kurt	
0.0																
1.0																
2.0																
3.0																
4.0																
5.0																
6.0																
7.0																
8.0																
9.0																
10.0																
11.0																
12.0																
13.0																
14.0																
15.0																
15.5																

Cruise: BARTLT 1301-82      Sample: 57-2      Date: 11/4/81  
 Position: 13-42N; 67-47W      Depth: 5046m  
 Calculated for: 23.0 Deg-C      0 m      400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev Phi	Skew	Kurt	N. Kurt
1.0																
												0.797	0.166			

Cruise: BARTLT 1301-82      Sample: 67-1  
 Position: 13-35N; 65-52W      Date: 11/18/81  
 Calculated for: 23.0 Deg-C      Depth: 4749m  
 35.00 d/oo      0 m 400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1536.1	1.004	0.000													
0.0	1534.2	1.003	0.031													
1.0	1522.7	0.996	0.112	87.0	11.08				4.57	12.07	83.36	10.33	2.57	-0.20	1.26	0.56
2.0	1505.5	0.984	0.102						0.72	15.29	83.99	10.34	2.26	-0.12	1.02	0.51
3.0	1500.7	0.981	0.093	85.2	10.64				0.75	16.60	82.65	10.24	2.31	-0.12	1.03	0.51
4.0	1499.2	0.980	0.083						0.76	15.53	83.71	10.22	2.20	-0.14	1.13	0.53
5.0	1501.4	0.982	0.083	84.8	10.50				0.39	14.67	84.94	10.25	2.12	-0.11	1.14	0.53
6.0	1500.7	0.981	0.083						0.22	13.39	86.38	10.41	2.13	-0.07	1.05	0.51
7.0	1499.2	0.980	0.083	82.7	10.94				0.32	13.99	85.70	10.27	2.06	-0.09	1.07	0.52
8.0	1498.1	0.980	0.083						0.12	12.62	87.26	10.39	2.06	-0.07	1.07	0.52
9.0	1497.0	0.979	0.074	79.7	9.59				0.19	13.05	86.76	10.40	2.08	-0.07	1.05	0.51
10.0	1495.9	0.978	0.065						0.12	12.85	87.03	10.30	1.98	-0.08	1.17	0.54
11.0	1494.5	0.977	0.065	78.9	10.06				0.09	12.88	87.03	10.11	1.84	-0.13	1.36	0.58
12.0	1494.5	0.977	0.065						0.22	13.01	86.77	10.24	2.00	-0.12	1.25	0.56
13.0	1495.9	0.978	0.123	78.1	8.33				0.88	13.15	85.97	10.27	2.09	-0.13	1.16	0.54
14.0	1495.2	0.978	0.102						1.03	14.04	84.93	10.14	2.06	-0.17	1.28	0.56
15.0	1493.7	0.977	0.065	78.0	7.37				0.33	12.71	86.96	10.25	1.98	-0.13	1.26	0.56
16.0	1493.7	0.977	0.048						0.63	12.75	86.62	10.27	1.99	-0.12	1.31	0.57
17.0	1493.7	0.977	0.048	78.2	8.13				0.38	10.73	88.89	10.39	1.92	-0.09	1.22	0.55
18.0	1493.7	0.977	0.065						0.91	12.70	86.39	10.21	2.00	-0.16	1.34	0.57
19.0	1498.1	0.980	0.093	78.1	8.69				0.32	12.27	87.41	10.14	1.86	-0.17	1.53	0.61
20.0	1495.2	0.978	0.074													
21.0	1495.2	0.978	0.031	76.4	10.36											
22.0	1495.2	0.978	0.031													
23.0	1495.2	0.978	0.031	76.9	11.83											
24.0	1495.6	0.978	0.031													
25.0	1495.6	0.978	0.048	77.5	12.74											
26.0	1494.5	0.977	0.048													
27.0	1494.5	0.977	0.048	77.5	15.39											
28.0	1494.5	0.977	0.048													
29.0	1494.5	0.977	0.065	76.9	15.10											
30.0	1495.9	0.978	0.102													
31.0	1496.7	0.979	0.102	76.7	16.37											
32.0	1494.1	0.977	0.312													
33.0	1495.9	0.978	0.278	76.6	16.57											
34.0																
35.0																
36.0																
37.0																

Cruise: BARTLT 1301-82      Sample: 67-4  
Position: 13-35N; 65-52W      Date: 11/18/81  
Calculated for: 23.0 Deg-C      Depth: 4749m  
                                        0 m 400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. %	Por. %	CaCO <sub>3</sub> %	C %	N %	Shear Strength %	Silt %	Clay %	Mean Phi	Dev	Skew	Kurt	N. Kurt
19.0	1495.6	0.978	0.102												
20.0	1493.7	0.977	0.048												
21.0	1493.7	0.977	0.031												
22.0	1495.9	0.978	0.048												
23.0	1497.0	0.979	0.065												<b>51.73</b>
24.0	1498.1	0.980	0.065												<b>48.17</b>
25.0	1497.0	0.979	0.065												
26.0	1495.9	0.978	0.065												
27.0	1496.3	0.978	0.065												
28.0	1495.6	0.978	0.065												
29.0	1495.6	0.978	0.065												<b>52.92</b>
30.0	1497.4	0.979	0.065												

Cruise: BARTLT 1301-82      Sample: 67-5  
 Position: 13-35N; 65-32W      Date: 11/18/81  
 Calculated for: 23.0 Deg-C      Depth: 4749m  
 0 m 400 kHz

Depth (cm)	v <sub>P</sub> m/sec	v <sub>P</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1532.8	1.002	0.000													
0.0	1512.4	0.989	0.102													
1.0	1506.0	0.985	0.102													2.97
2.0	1502.7	0.983	0.083													
3.0	1500.5	0.981	0.083													
4.0	1498.7	0.980	0.093													
5.0	1498.7	0.980	0.083													11.30
6.0	1497.2	0.979	0.065													
7.0	1495.7	0.978	0.048													37.46
8.0	1493.9	0.977	0.048													
9.0	1493.6	0.977	0.048													
10.0	1493.2	0.976	0.048													
11.0	1495.0	0.978	0.065													46.38
12.0	1493.6	0.977	0.065													
13.0	1493.2	0.976	0.031													
14.0	1493.2	0.976	0.048													
15.0	1493.6	0.977	0.048													
16.0	1493.6	0.977	0.065													
17.0	1493.2	0.976	0.065													75.52
18.0	1493.9	0.977	0.031													
19.0	1494.5	0.977	0.031													
20.0	1494.5	0.977	0.031													
21.0	1495.2	0.978	0.048													
22.0	1493.4	0.976	0.048													
23.0	1494.5	0.977	0.065													44.00
24.0	1494.5	0.977	0.065													
25.0	1495.2	0.978	0.048													48.17
26.0	1495.6	0.978	0.065													
27.0	1495.6	0.978	0.065													
28.0	1495.6	0.978	0.065													
29.0	1495.6	0.978	0.065													
30.0																
31.0																

Cruise: BARTLT 1301-82      Sample: 67-6      Date: 11/18/81  
 Position: 13-35N; 65-52W      Depth: 4749m  
 Calculated for: 23.0      Deg-C      35.00 o/oo      0 m 400 kHz  
 Depth      Vp      Attn.      %      Shear      %      Mean      Dev      Skew      Kurt      N.  
 (cm)      m/sec      Ratio      k      Por.      CaCO<sub>3</sub>      C      N      Str.      Sand      Silt      Clay      Phi      Kur t  
 19.0      1502.9      0.983      0.558  
 20.0      1495.2      0.978      0.065  
 21.0      1495.2      0.978      0.065  
 22.0      1495.2      0.978      0.065  
 23.0      1496.3      0.978      0.065  
 24.0      1497.4      0.979      0.065  
 25.0      1496.3      0.978      0.065  
 26.0      1496.3      0.978      0.065  
 27.0      1494.8      0.977      0.048  
 28.0  
 29.0  
 30.0  
 31.0

Cruise: BAKILL 1301-82      Sample: 67-8  
 Position: 13-35N; 65-52W      Date: 11/18/81  
 Calculated for: 23.0 Deg-C      Depth: 4749m  
                                         0 m 400 kHz

Depth (cm)	VP m/sec	Vp Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1529.6	1.000	0.000													
0.0	1521.3	0.995	0.065													
1.0	1509.6	0.987	0.112													3.57
2.0	1498.1	0.980	0.083													
3.0	1494.5	0.977	0.074													
4.0	1493.0	0.976	0.074													
5.0	1492.3	0.976	0.065													13.08
6.0	1491.9	0.976	0.065													
7.0	1489.4	0.974	0.065													19.62
8.0	1489.7	0.974	0.074													
9.0	1490.5	0.975	0.065													
10.0	1488.3	0.973	0.048													
11.0	1487.9	0.973	0.065													38.65
12.0	1487.9	0.973	0.065													
13.0	1487.9	0.973	0.048													
14.0	1487.2	0.972	0.048													42.81
15.0	1487.2	0.972	0.048													
16.0	1487.9	0.973	0.065													
17.0	1489.4	0.974	0.065													78.49
18.0	1489.0	0.974	0.048													
19.0	1487.6	0.973	0.031													57.09
20.0	1488.6	0.973	0.031													
21.0	1487.9	0.973	0.031													
22.0	1488.3	0.973	0.031													
23.0	1488.3	0.973	0.031													51.14
24.0	1484.3	0.971	0.031													
25.0	1487.6	0.973	0.031													41.03
26.0	1487.6	0.973	0.048													
27.0	1487.2	0.972	0.048													
28.0	1488.3	0.973	0.065													44.00
29.0	1488.6	0.973	0.083													
30.0																66.60
31.0																

Cruise: BARTLT 1301-82      Sample: 67-9  
 Position: 13-35N; 65-52W      Date: 11/18/81  
 Calculated for: 23.0 Deg-C      Depth: 4749m  
                                     0 m 400 kHz

Depth (cm)	$V_p$ m/sec	Attn. Ratio	% Por.	% CaCO <sub>3</sub>	% N	% Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	0.809	0.177												

Cruise: BARTLT 1301-82      Sample: 68-1  
 Position: 13-34N; 65-45W  
 Calculated for: 23.0 Deg-C      35.00 o/oo

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1528.6	0.999	0.015													
0.0	1522.5	0.995	0.117													
1.0	1496.3	0.978	0.098													3.57
2.0	1493.0	0.976	0.098													
3.0	1492.3	0.976	0.088													
4.0	1491.2	0.975	0.088													
5.0	1490.5	0.975	0.088													17.24
6.0	1488.3	0.973	0.079													
7.0	1487.6	0.973	0.079													36.27
8.0	1487.2	0.972	0.079													
9.0	1487.2	0.972	0.079													
10.0	1486.8	0.972	0.079													
11.0	1486.8	0.972	0.062													55.30
12.0	1487.6	0.973	0.062													
13.0	1488.6	0.973	0.079													
14.0	1489.4	0.974	0.079													
15.0	1491.2	0.975	0.079													
16.0	1490.1	0.974	0.079													
17.0	1489.7	0.974	0.079													80.87
18.0	1489.0	0.974	0.079													
19.0	1488.3	0.973	0.062													64.22
20.0	1488.3	0.973	0.079													
21.0	1489.0	0.974	0.079													
22.0	1489.7	0.974	0.062													
23.0	1488.3	0.973	0.062													97.52
24.0	1488.3	0.973	0.079													
25.0	1491.9	0.976	0.079													115.36
26.0	1491.9	0.976	0.079													
27.0	1490.5	0.975	0.079													
28.0	1489.7	0.974	0.098													82.66
29.0																

Cruise: BARTLT 1301-82      Sample: 68-3  
 Position: 13-34N 65-45W      Date: 11/18/81  
 Calculated for: 23.0 Deg-C      Depth: 4447m  
 0 m 400 kHz

Depth (cm)	Vp m/sec	Vp/Ratio	Attn. k	% Por.	% CaCO3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	1501.8	0.982	0.093	86.9	17.63				7.47	10.32	82.21	10.11	2.80	-0.32	1.89	0.65
2.0	1495.6	0.978	0.074													
3.0	1493.7	0.977	0.074	83.9	16.53				4.76	9.94	85.30	10.20	2.28	-0.27	1.90	0.65
4.0	1493.0	0.976	0.083													
5.0	1492.3	0.976	0.074	82.5	15.60				4.46	10.00	85.54	10.32	2.27	-0.20	1.59	0.61
6.0	1491.9	0.976	0.065													
7.0	1489.4	0.974	0.065	81.1	14.19				2.03	10.49	87.48	10.36	2.01	-0.14	1.58	0.61
8.0	1489.4	0.974	0.065													
9.0	1488.6	0.973	0.065	80.1	13.46				1.23	9.29	89.47	10.39	1.82	-0.14	1.93	0.66
10.0	1488.6	0.973	0.048													
11.0	1488.6	0.973	0.031	78.9	13.25				0.89	9.34	89.76	10.45	1.85	-0.10	1.56	0.61
12.0	1488.6	0.973	0.048													
13.0	1488.6	0.973	0.048	77.5	16.41				1.75	8.57	89.68	10.37	1.82	-0.14	1.64	0.62
14.0	1490.1	0.974	0.065													
15.0	1491.6	0.975	0.083	77.1	17.66				2.49	10.53	86.98	10.25	2.05	-0.22	1.87	0.65
16.0	1491.6	0.975	0.083													
17.0	1490.8	0.975	0.065	77.4	18.46											
18.0	1490.8	0.975	0.065													
19.0	1490.8	0.975	0.048	77.4	16.70											
20.0	1491.2	0.975	0.048													
21.0	1490.5	0.975	0.048	76.3	16.34											
22.0	1490.8	0.975	0.048													
23.0	1489.0	0.974	0.065	76.3	19.73											
24.0	1489.4	0.974	0.048													
25.0	1489.4	0.974	0.048	76.0	19.37											
26.0																
27.0																
28.0																
29.0																

Cruise: BARTLT 1301-82      Sample: 68-4  
 Position: 13-34N; 65-45W      Date: 11/18/81  
 Calculated for: 23.0 Deg-C      Depth: 4447m  
 0 m 400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.2	1.001	0.000													
0.0	1527.9	0.999	0.031													
1.0	1506.8	0.985	0.102													3.57
2.0	1499.7	0.981	0.093													
3.0	1494.9	0.977	0.083													
4.0	1492.0	0.976	0.074													14.87
5.0	1492.0	0.976	0.083													
6.0	1492.0	0.976	0.083													
7.0	1491.3	0.975	0.083													28.54
8.0	1490.6	0.975	0.065													
9.0	1489.1	0.974	0.065													
10.0	1487.7	0.973	0.065													
11.0	1488.4	0.973	0.065													33.90
12.0	1487.3	0.972	0.065													
13.0	1488.8	0.973	0.065													
14.0	1488.4	0.973	0.048													
15.0	1488.4	0.973	0.048													
16.0	1491.3	0.975	0.065													
17.0	1491.7	0.975	0.065													95.74
18.0	1489.8	0.974	0.065													
19.0	1489.8	0.974	0.065													57.09
20.0	1489.8	0.974	0.065													
21.0	1489.8	0.974	0.065													95.14
22.0	1489.8	0.974	0.065													
23.0	1489.8	0.974	0.065													
24.0	1490.9	0.975	0.065													
25.0	1490.9	0.975	0.065													113.58
26.0	1490.9	0.975	0.065													

Cruise: BARTLT 1301-82		Sample: 68-6		Date: 11/18/81	
Position: 13-34N; 65-45W				Depth: 4447m	
Calculated for: 23.0 Deg-C		35.00 d/oo		0 m 400 kHz	
Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>
WATER	1531.0	1.001	0.000		
0.0	1524.9	0.997	0.102		
1.0	1502.0	0.982	0.093		
2.0	1499.1	0.980	0.083		
3.0	1496.5	0.978	0.083		
4.0	1494.3	0.977	0.083		
5.0	1493.2	0.976	0.074		
6.0	1492.8	0.976	0.074		
7.0	1492.8	0.976	0.083		
8.0	1490.3	0.974	0.065		
9.0	1489.2	0.974	0.048		
10.0	1489.6	0.974	0.048		
11.0	1490.3	0.974	0.048		
12.0	1490.3	0.974	0.048		
13.0	1490.3	0.974	0.065		
14.0	1489.2	0.974	0.065		
15.0	1492.8	0.976	0.065		
16.0	1493.9	0.977	0.065		
17.0	1492.1	0.976	0.065		
18.0	1490.3	0.974	0.065		
19.0	1490.6	0.975	0.065		
20.0	1491.4	0.975	0.065		
21.0	1491.0	0.975	0.065		
22.0	1491.4	0.975	0.048		
23.0	1492.5	0.976	0.065		
24.0	1491.7	0.975	0.083		
25.0	1491.7	0.975	0.065		
26.0	1493.2	0.976	0.083		
27.0	1494.7	0.977	0.083		
28.0	1495.0	0.978	0.294		
29.0	1493.2	0.976	0.370		
				70.76	

Cruise: BARTLT 1301-82      Sample: 68-7  
Position: 13-34N, 65-45W      Date: 1/18/81  
Calculated for: 23.0      Depth: 4447m  
    0 m 400 kHz

Depth (cm)	$v_p$ m/sec	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
0.831	0.178														
1.0															

Cruise: BARTI 1301-82      Sample: 69-7  
 Position: 13-34N; 65-28W      Date: 11/18/81  
 Calculated for: 23.0      Depth: 4188m  
                                         0 m 400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CACO3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.4	1.001	-0.015													
0.0	1529.6	1.000	-0.015													
1.0	1513.3	0.989	0.140													
2.0	1503.2	0.983	0.140													
3.0	1503.2	0.983	0.097													
4.0	1494.0	0.977	0.097													
5.0	1492.6	0.976	0.097													
6.0	1492.6	0.976	0.087													
7.0	1491.8	0.975	0.078													
8.0	1490.4	0.975	0.068													
9.0	1490.0	0.974	0.050													
10.0	1489.7	0.974	0.059													
11.0	1489.7	0.974	0.050													
12.0	1489.7	0.974	0.068													
13.0	1489.6	0.974	0.050													
14.0	1489.7	0.974	0.050													
15.0	1492.6	0.976	0.050													
16.0	1493.7	0.977	0.078													
17.0	1493.3	0.976	0.078													
18.0	1493.3	0.976	0.068													
19.0	1493.3	0.976	0.078													
20.0	1491.5	0.975	0.068													
21.0													107.04			
22.0																
23.0																
24.0																
25.0													88.01			

Cruise: BARIU1 1301-82  
Position: 13-34N 65-28W  
Calculated for: 23.0 Deg-C

Date: 11/18/81  
Depth: 4188m  
0 m 400 kHz

Sample: 69-8  
c/o/o

Depth (cm)	Vp m/sec	Vp Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.2	1.001	-0.015													
0.0	1521.8	0.995	0.093													
1.0	1510.1	0.987	0.144													1.78
2.0	1502.3	0.982	0.144													
3.0	1499.7	0.981	0.133													
4.0	1496.0	0.978	0.123													
5.0	1494.9	0.977	0.112													5.95
6.0	1493.5	0.977	0.112													
7.0	1492.0	0.976	0.102													10.71
8.0	1490.6	0.975	0.102													
9.0	1489.5	0.974	0.074													
10.0	1488.4	0.973	0.065													
11.0	1488.4	0.973	0.048													45.19
12.0	1489.1	0.974	0.065													
13.0	1489.8	0.974	0.065													
14.0	1489.1	0.974	0.048													
15.0	1489.1	0.974	0.065													
16.0	1490.6	0.975	0.123													
17.0	1498.2	0.980	0.409													68.38
18.0	1505.3	0.984	0.752													
19.0	1427.2	0.933	1.458													
20.0	1427.2	0.933	1.560													
21.0	1427.2	0.933	1.704													
22.0	1377.3	0.901	1.951													
23.0	1453.7	0.950	1.378													
24.0	1510.9	0.988	0.558													
25.0																

Cruise: BARTLT1 1301-82      Sample: 69-9      Date: 11/18/81  
 Position: 13-34N;65-28W      Depth: 4188m  
 Calculated for: 23.0 Deg-C      0 m 400 kHz

Cruise: BARTLT 1301-82      Sample: 69-10  
 Position: 13-34N; 65-28W      Date: 11/18/81  
 Calculated for: 23.0      Depth: 4188m  
                                         0 m      400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CaCO3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.4	1.001	0.000													
0.0	1528.9	1.000	0.031													
1.0	1504.8	0.984	0.133													3.57
2.0	1498.9	0.980	0.123													
3.0	1496.7	0.979	0.123													
4.0	1494.5	0.977	0.112													
5.0	1494.1	0.977	0.112													7.73
6.0	1491.5	0.975	0.093													
7.0	1491.9	0.976	0.083													29.14
8.0	1490.5	0.975	0.083													
9.0	1490.5	0.975	0.074													
10.0	1489.7	0.974	0.083													
11.0	1489.4	0.974	0.083													49.95
12.0	1489.7	0.974	0.093													
13.0	1491.5	0.975	0.123													64.82
14.0	1490.5	0.975	0.093													
15.0	1490.1	0.974	0.102													
16.0	1492.3	0.976	0.102													
17.0	1491.5	0.975	0.102													104.06
18.0	1491.9	0.976	0.102													
19.0	1493.4	0.976	0.112													89.79
20.0	1493.0	0.976	0.133													

Cruise: BARTLY 1301-82      Sample: 69-16      Date: 11/18/81  
 Position: 13-34N; 65-28W      Depth: 4188m  
 Calculated for: 23.0 Deg-C      35.00 o/o      0 m 400 kHz

Depth (cm)	$V_F$ m/sec	Attn. Ratio	Attn. %	For. CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0	0.618	0.138													

Cruise: BARTLI 1301-82      Sample: 70-3      Date: 11/19/81  
Position: 13-33N; 65-24W      Depth: 3937m  
Calculated for: 23.0 Deg-C      0 m      400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CaCO3	% C	% N	Shear Str.	% Sand	% Silt	Clay	Mean Phi	Dev Phi	Skew	Kurt	N. Kurt
1.0												0.555	0.136			

Cruise: BARTLI 1301-82  
Position: 13-33N; 65-25W  
Calculated for: 23.0 Deg-C

Date: 11/19/81  
Depth: 3937m  
0 m 400 kHz

Sample: 70-6

Depth (cm)	VE m/sec	VP Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1523.3	0.996	0.000													
0.0	1501.5	0.982	0.152													
1.0	1491.9	0.975	0.129													
2.0	1489.0	0.974	0.140													
3.0	1486.8	0.972	0.140													
4.0	1485.0	0.971	0.129													
5.0	1485.0	0.971	0.118													
6.0	1484.3	0.970	0.097													
7.0	1484.3	0.970	0.097													
8.0	1484.3	0.970	0.108													
9.0	1483.9	0.970	0.129													
11.0	1494.1	0.977	0.399													
12.0	1483.9	0.970	0.118													
13.0	1483.5	0.970	0.152													
14.0	1486.4	0.972	0.279													
15.0	1492.3	0.976	0.558													
16.0	1500.4	0.981	0.529													
17.0	1500.4	0.981	0.467													
18.0	1505.9	0.985	0.750													
19.0	1505.9	0.985	1.196													
20.0	1497.4	0.979	0.455													
21.0	1495.6	0.978	0.334													
22.0	1492.3	0.976	0.296													
23.0	1489.3	0.974	0.217													
24.0	1491.9	0.975	0.334													

Cruise: BARTLT 1301-82  
 Position: 13-33N; 65-25W  
 Calculated for: 23.0 Deg-C

Date: 11/19/81  
 Depth: 3937m  
 0 m 400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1527.1	0.999	-0.015													
0.0	1515.7	0.991	0.068													
1.0	1496.7	0.979	0.059													5.95
2.0	1492.6	0.976	0.129													
3.0	1490.4	0.975	0.129													
4.0	1490.1	0.974	0.118													
5.0	1490.1	0.974	0.118													
6.0	1490.1	0.974	0.108													
7.0	1489.3	0.974	0.097													22.60
8.0	1489.3	0.974	0.097													
9.0	1491.5	0.975	0.118													
10.0	1491.5	0.975	0.129													
11.0	1489.0	0.974	0.108													64.82
12.0	1489.7	0.974	0.118													
13.0	1489.3	0.974	0.097													79.68
14.0	1487.5	0.973	0.078													
15.0	1487.5	0.973	0.068													
16.0	1487.5	0.973	0.078													
17.0	1488.6	0.973	0.118													145.69
18.0	1492.6	0.976	0.118													
19.0	1492.6	0.976	0.129													83.25
20.0	1491.5	0.975	0.108													
21.0	1490.1	0.974	0.118													
22.0	1490.1	0.974	0.118													
23.0	1490.4	0.975	0.203													
24.0																

Depth (cm)	VP m/sec	VE Ratio	Attn. k	% Por.			% CaCO <sub>3</sub>			% N			% Shear			% Sand			% Silt			% Clay			Mean Phi			Dev			Skew			Kurt			
				C	Str.	C	C	Str.	C	N	Str.	C	N	Str.	C	N	Str.	C	N	Str.	C	N	Str.	C	N	Str.	C	N	Str.	C	N	Str.	C	N	Str.	C	N
WATER	1526.4	0.998	0.000																																		
0.0	1507.4	0.986	0.177																																		
1.0	1495.9	0.978	0.164																																		
2.0	1491.9	0.975	0.152																																		
3.0	1490.8	0.975	0.152																																		
4.0	1489.7	0.974	0.140																																		
5.0	1488.6	0.973	0.140																																		
6.0	1488.2	0.973	0.118																																		
7.0	1487.9	0.973	0.097																																		
8.0	1487.9	0.973	0.087																																		
9.0	1487.9	0.973	0.087																																		
10.0	1487.2	0.972	0.087																																		
11.0	1486.8	0.972	0.087																																		
12.0	1489.0	0.974	0.129																																		
13.0	1491.2	0.975	0.190																																		
14.0	1491.2	0.975	0.177																																		
15.0	1487.9	0.973	0.140																																		
16.0	1487.9	0.973	0.108																																		
17.0	1486.4	0.972	0.087																																		
18.0	1486.4	0.972	0.068																																		
19.0	1486.8	0.972	0.059																																		
20.0	1490.4	0.975	0.108																																		
21.0	1490.4	0.975	0.097																																		
22.0	1490.1	0.974	0.108																																		
23.0	1489.3	0.974	0.129																																		
24.0	1489.3	0.974	0.247																																		
25.0	1489.0	0.974	0.232																																		

Cruise: BARTLT 1301-82      Sample: 70-11  
 Position: 13-33N; 65-25W      Date: 11/19/81  
 Calculated for: 23.0 Deg-C      Depth: 3937m  
                                       0 m 400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1525.2	0.997	0.000													
0.0	1514.2	0.990	0.218													
1.0	1495.9	0.978	0.156	85.2	32.30				33.00	7.50	59.00	7.52	4.55	-0.46	0.59	0.37
2.0	1491.9	0.975	0.133													
3.0	1491.2	0.975	0.133	83.0	26.10				14.88	10.04	75.09	9.13	3.49	-0.49	1.64	0.62
4.0	1490.1	0.974	0.133													
5.0	1489.0	0.974	0.112	81.5	22.06											
6.0	1487.9	0.973	0.102													
7.0	1487.2	0.972	0.093	80.8	19.67				6.25	12.50	81.25	10.03	2.76	-0.29	1.54	0.61
8.0	1487.2	0.972	0.093													
9.0	1487.5	0.973	0.102	81.5	22.18				5.98	14.27	79.75	9.90	2.73	-0.31	1.57	0.61
10.0	1486.8	0.972	0.102													
11.0	1486.8	0.972	0.112	78.1	20.78				4.26	14.25	81.49	10.08	2.50	-0.21	1.24	0.55
12.0	1487.2	0.972	0.083													
13.0	1487.9	0.973	0.083	77.5	20.80				2.99	12.40	84.61	10.29	2.25	-0.13	1.21	0.55
14.0	1487.5	0.973	0.093													
15.0	1487.5	0.973	0.093	76.7	21.00				4.19	11.48	84.33	10.17	2.29	-0.20	1.49	0.60
16.0	1497.9	0.973	0.083													
17.0	1492.3	0.976	0.112	76.0	19.38				2.57	11.33	86.10	10.12	2.00	-0.18	1.54	0.61
18.0	1491.5	0.975	0.102													
19.0	1490.4	0.975	0.102	76.7	21.50				2.97	11.97	85.06	10.15	2.13	-0.15	1.35	0.57
20.0	1488.6	0.973	0.102													
21.0	1488.2	0.973	0.112	77.5	22.24				4.11	12.45	83.44	10.14	2.34	-0.20	1.39	0.58
22.0																
23.0																
24.0																
25.0																

Cruise: BARTLT 1301-82      Sample: 71-7  
 Position: 13-31N; 65-10W      Date: 11/19/81  
 Calculated for: 23.0 Deg-C      Depth: 3775m  
                                       0 m 400 kHz

Depth (cm)	VE m/sec	VP m/sec	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1524.4	0.997	0.000													
0.0	1512.7	0.989	0.156													
1.0	1494.5	0.977	0.218													
2.0	1491.5	0.975	0.232													
3.0	1489.0	0.974	0.167													
4.0	1487.2	0.972	0.167													
5.0	1487.2	0.972	0.156													
6.0	1486.1	0.972	0.144													
7.0	1486.1	0.972	0.144													
8.0	1486.1	0.972	0.144													
9.0	1486.4	0.972	0.133													
10.0	1485.3	0.971	0.144													
11.0	1483.5	0.970	0.205													
12.0	1482.4	0.969	0.167													
13.0	1482.8	0.970	0.133													
14.0	1483.9	0.970	0.133													
15.0	1484.3	0.970	0.133													
16.0	1487.5	0.973	0.144													
17.0	1483.9	0.970	0.133													
18.0	1485.3	0.971	0.144													
19.0	1488.2	0.973	0.167													
20.0	1487.2	0.972	0.167													
21.0	1486.8	0.972	0.192													
22.0	1483.9	0.970	0.144													
23.0	1487.9	0.973	0.205													

Cruise: BARTLI 1301-82      Sample: 71-8  
 Position: 13-31N; 65-10W      Date: 11/19/81  
 Calculated for: 23.0 Deg-C      Depth: 3775m  
 0 m 400 kHz

Depth (cm)	$V_F$ m/sec	$V_E$ m/sec	Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1522.9	0.996	0.015														
0.0	1516.6	0.992	0.205														
1.0	1495.2	0.978	0.218														
2.0	1490.4	0.975	0.192														5.95
3.0	1488.2	0.973	0.179														
4.0	1487.2	0.972	0.167														
5.0	1487.2	0.972	0.167														13.68
6.0	1485.3	0.971	0.144														
7.0	1485.3	0.971	0.133														17.84
8.0	1486.4	0.972	0.144														
9.0	1484.6	0.971	0.133														
10.0	1483.9	0.970	0.123														
11.0	1484.6	0.971	0.144														70.41
12.0	1484.3	0.970	0.133														
13.0	1483.2	0.970	0.102														96.93
14.0	1483.2	0.970	0.093														
15.0	1483.2	0.970	0.093														
16.0	1483.5	0.970	0.102														118.93
17.0	1485.0	0.971	0.102														
18.0	1486.4	0.972	0.144														
19.0	1484.3	0.970	0.144														165.31
20.0	1490.1	0.974	0.167														
21.0	1489.7	0.974	0.192														
22.0	1485.0	0.971	0.144														
23.0	1483.2	0.970	0.133														96.93
24.0	1482.8	0.970	0.123														
25.0	1485.3	0.971	0.192														

Cruise: BARTI 1301-82		Position: 13-31N; 65-10W		Sample: 71-9		Date: 11/19/81										
		Calculated for: 23.0 Deg-C		35.00 o/oo		Depth: 3775m 0 m 400 kHz										
Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CaCO3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1523.7	0.996	0.015													
0.0	1520.6	0.994	0.102													
1.0	1494.8	0.977	0.083													8.32
2.0	1490.8	0.975	0.167													
3.0	1488.2	0.973	0.167													
4.0	1487.5	0.973	0.167													
5.0	1486.1	0.972	0.156													23.79
6.0	1485.0	0.971	0.133													
7.0	1485.3	0.971	0.133													26.76
8.0	1485.0	0.971	0.123													
9.0	1485.0	0.971	0.112													
10.0	1485.0	0.971	0.123													
11.0	1485.0	0.971	0.123													54.11
12.0	1483.9	0.970	0.102													
13.0	1482.4	0.969	0.093													98.71
14.0	1482.4	0.969	0.102													
15.0	1482.4	0.969	0.102													
16.0	1484.3	0.970	0.093													
17.0	1489.7	0.974	0.144													127.26
18.0	1487.5	0.973	0.144													
19.0	1487.5	0.973	0.156													
20.0	1485.0	0.971	0.133													
21.0	1483.9	0.970	0.133													
22.0	1485.0	0.971	0.247													
23.0	1486.1	0.972	0.349													93.36
24.0	1486.1	0.972	0.370													

Cruise: BARTLI 1301-82      Sample: 71-10  
 Position: 13-31N; 65-10W      Date: 11/19/81  
 Calculated for: 23.0 Deg-C      Depth: 3775m  
 0 m 400 kHz

Depth (cm)	$v_p$ m/sec	$v_p/v_s$ Ratio	Attn. $k$	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1523.7	0.996	0.015													
0.0	1521.8	0.995	0.065													
1.0	1501.8	0.982	0.192	85.3	26.81											
2.0	1498.5	0.980	0.247													
3.0	1496.7	0.979	0.294	83.5	28.07											
4.0	1489.3	0.974	0.232													
5.0	1487.9	0.973	0.218	82.1	26.51											
6.0	1487.2	0.972	0.218													
7.0	1485.3	0.971	0.167	79.5	22.23											
8.0	1485.0	0.971	0.144													
9.0	1485.0	0.971	0.156	78.2	23.32											
10.0	1486.6	0.972	0.294													
11.0	1486.4	0.972	0.247	77.0	21.60											
12.0	1485.0	0.971	0.167													
13.0	1486.1	0.972	0.179	76.9	21.28											
14.0	1489.0	0.974	0.232													
15.0	1491.5	0.975	0.493	76.8	21.52											
16.0	1494.1	0.977	0.506													
17.0	1502.2	0.982	0.740	76.5	21.80											
18.0	1492.3	0.976	0.409													
19.0	1454.4	0.951	0.192	76.0	19.02											
20.0																
21.0	75.4	22.93														

Cruise: BARTLT 1301-82      Sample: 73-15  
 Position: 13-33N; 64-42W      Date: 11/20/81  
 Calculated for: 23.0 Deg-C      Depth: 3542m  
 0 m 400 kHz

Depth (cm.)	Vp m/sec	Vp Ratio	Attr. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1522.9	0.996	0.000													
0.0	1507.8	0.986	0.278													
1.0	1491.9	0.976	0.192													
2.0	1488.6	0.973	0.156													
3.0	1487.2	0.972	0.167													
4.0	1486.6	0.972	0.156													
5.0	1486.6	0.972	0.144													24.98
6.0	1487.9	0.973	0.144													
7.0	1487.9	0.973	0.167													37.48
8.0	1486.6	0.972	0.156													
9.0	1488.6	0.973	0.156													
10.0	1490.1	0.974	0.218													
11.0	1491.2	0.975	0.391													38.06
12.0	1490.5	0.975	0.205													
13.0	1491.9	0.976	0.247													106.44
14.0	1497.1	0.979	0.330													
15.0	1506.3	0.985	0.409													
16.0	1513.8	0.990	1.344													
17.0	1530.5	1.001	1.169													137.36
18.0	1530.5	1.001	1.344													
19.0	1529.4	1.000	1.131													
20.0	1529.4	1.000	1.344													
21.0	1529.4	1.000	1.560													
22.0	1518.7	0.993	0.942													
23.0	1509.3	0.987	0.820													86.22
24.0	1501.1	0.982	0.471													
25.0	1498.5	0.980	0.349													93.36
26.0	1496.7	0.979	0.312													
27.0	1497.8	0.979	0.312													
28.0	1504.4	0.984	0.205													
29.0																63.63

Cruise: BARTI 1301-b2      Sample: 73-17  
Position: 13-33N; 64-42W  
Calculated rot: 23.0      Deg-C      35.00 o/oo

Date: 11/20/81  
Depth: 3542m  
0 m      400 kHz

Depth (cm)	VP m/sec	VP Ratio	Attn. K	% Por.	% CACO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0																

Cruise: BARTLI 1301-82      Sample: 73-18  
 Position: 13-33N; 64-42W      Date: 11/20/81  
 Calculated for: 23.0 Deg-C      Depth: 3542m  
                                       0 m 400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attr. %	% Por.	% CaCO3	% C	% N Str.	Shear Strength Phi	Mean Phi	Dev	Skew	Kurt	N. Kurt
1.0													
2.0													
3.0													
4.0													
5.6													
6.0													
7.0													
8.0													
9.0													
10.0													
11.0													
12.6													
13.0													
14.0													
15.0													
16.0													
17.0													
16.0													
19.0													
20.0													
21.0													
22.0													
23.0													
24.0													
25.0													
26.6													
27.0													
28.0													
29.0													
30.0													
31.0													

Cruise: BARTLT 1301-82      Sample: 74-1  
 Position: 13-32N 64-44W  
 Calculated tot: 23.0 Deg-C

Date: 11/21/81  
 Depth: 350.3m  
 0 m 400 kHz

Depth (cm)	$v_p$ m/sec	$v_F$	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1530.1	1.000	0.015													
0.0	1507.4	0.986	0.167													
1.0	1499.2	0.980	0.179													
2.0	1495.9	0.978	0.179													
3.0	1494.8	0.977	0.218													
4.0	1492.3	0.976	0.156													
5.0	1491.6	0.975	0.144													
6.0	1491.6	0.975	0.144													
7.0	1491.6	0.975	0.167													
8.0	1491.6	0.975	0.167													
9.0	1491.2	0.975	0.156													
10.0	1491.6	0.975	0.179													
11.0	1490.5	0.975	0.179													
12.0	1490.5	0.975	0.156													
13.0	1488.6	0.973	0.133													
14.0	1487.9	0.973	0.102													
15.0	1488.6	0.973	0.102													
16.0	1490.1	0.974	0.112													
17.0	1494.8	0.977	0.278													
18.0	1500.0	0.981	0.419													
19.0	1500.0	0.981	0.294													
20.0	1498.5	0.980	0.278													
21.0	1498.5	0.980	0.312													
22.0	1497.8	0.979	0.312													
23.0	1501.5	0.982	0.518													
24.0	1504.8	0.984	0.493													
25.0	1503.3	0.983	0.638													
26.0	1507.0	0.985	0.964													
27.0	1507.0	0.985	0.696													
28.0	1501.8	0.982	0.544													
29.0	1500.7	0.981	0.518													

Cruise: BARTH 1301-82  
Position: 13-32N; 64-44W  
Calculated for: 23.0 Deg-C

Date: 11/21/81  
Depth: 3503m  
0 m 400 kHz

Sample: 74-2  
O/OC

Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. K	% Por.	CaCO <sub>3</sub>	% C	% N	Shear Str.	% Silt	% Clay	mean phi	Dev	Skew	Kurt	N. Kurt
1.0	1497.0	0.979	0.232												6.54
2.0	1493.4	0.976	0.218												
3.0	1492.6	0.976	0.192												
4.0	1492.6	0.976	0.192												
5.0	1494.1	0.977	0.205												24.38
6.0	1491.6	0.975	0.192												
7.0	1491.2	0.975	0.192												35.68
8.0	1493.7	0.977	0.232												
9.0	1493.7	0.977	0.218												
10.0	1492.6	0.976	0.167												
11.0	1491.9	0.976	0.144												47.57
12.0	1490.8	0.975	0.144												
13.0	1493.0	0.976	0.167												63.63
14.0	1492.6	0.976	0.179												
15.0	1492.6	0.976	0.144												
16.0	1494.5	0.977	0.144												
17.0	1496.7	0.979	0.167												102.87
18.0	1493.4	0.976	0.179												
19.0	1493.4	0.976	0.205												
20.0	1494.8	0.977	0.218												
21.0	1500.0	0.981	0.247												
22.0	1495.6	0.978	0.205												
23.0	1494.1	0.977	0.232												83.27
24.0	1493.4	0.976	0.205												
25.0	1493.7	0.977	0.192												
26.0	1496.7	0.979	0.247												

Cruise: BARTLT 1301-82      Sample: 74-3  
 Position: 13-32N; 64-44W      Date: 11/21/81  
 Calculated for: 23.0 Deg-C      Depth: 3503m  
 0 m 400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1527.8	0.999	0.000													
0.0	1514.1	0.990	0.205													
1.0	1497.0	0.979	0.192													
2.0	1491.2	0.975	0.192													
3.0	1492.6	0.976	0.179													
4.0	1492.8	0.976	0.192													
5.0	1490.5	0.975	0.179													
6.0	1489.7	0.974	0.167													
7.0	1489.7	0.974	0.156													
8.0	1489.0	0.974	0.167													
9.0	1489.4	0.974	0.156													
10.0	1488.6	0.973	0.179													
11.0	1488.3	0.973	0.179													
12.0	1488.6	0.973	0.167													
13.0	1488.6	0.973	0.167													
14.0	1488.6	0.973	0.179													
15.0	1487.9	0.973	0.179													
16.0	1487.2	0.972	0.133													
17.0	1488.3	0.973	0.133													
18.0	1491.2	0.975	0.144													
19.0	1501.5	0.982	0.544													
20.0	1512.3	0.989	0.942													
21.0	1512.6	0.989	1.169													
22.0	1511.1	0.988	1.038													
23.0	1510.8	0.988	1.378													
24.0	1513.8	0.990	1.458													
25.0	1503.3	0.983	1.458													
26.0	1498.1	0.980	0.885													
27.0	1505.2	0.984	0.620													
28.0	1501.8	0.982	0.820													

Cruise: BARTLT 1301-82      Sample: 76-8  
 Position: 13-33N; 64-41W      Date: 11/21/81  
 Calculated for: 23.0      Depth: 3490m  
 Deg-C      0 m      400 kHz

Sample: 76-8  
C 35.00 o/oo

Cruise: BARTLI 1301-82      Sample: 76-11  
 Position: 13-33N; 64-41W  
 Calculated for: 23.0      Deg-C      35.00      o/oo

Depth (cm)	$v_p$ m/sec	$v_p/v_s$ Ratio	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N.	Kurt
WATER	1527.6	0.999	0.000														
0.0	1525.7	0.998	0.048														
1.0	1507.2	0.986	0.294														
2.0	1495.0	0.978	0.218														
3.0	1492.1	0.976	0.192														
4.0	1491.7	0.975	0.192														<b>22.60</b>
5.0	1490.6	0.975	0.179														
6.0	1489.5	0.974	0.167														<b>40.44</b>
7.0	1491.0	0.975	0.156														
8.0	1491.0	0.975	0.167														
9.0	1491.4	0.975	0.192														
10.0	1491.4	0.975	0.167														
11.0	1490.6	0.975	0.179														<b>52.33</b>
12.0	1490.6	0.975	0.167														<b>76.12</b>
13.0	1489.2	0.974	0.156														
14.0	1489.5	0.974	0.144														
15.0	1488.8	0.973	0.123														
16.0	1490.6	0.975	0.167														
17.0	1491.7	0.975	0.179														<b>133.20</b>
18.0	1493.6	0.977	0.167														<b>107.63</b>
19.0	1494.7	0.977	0.156														
20.0	1493.9	0.977	0.156														
21.0	1493.2	0.976	0.167														
22.0	1493.2	0.976	0.192														<b>141.53</b>
23.0	1498.0	0.979	0.247														
24.0	1497.2	0.979	0.294														<b>113.58</b>
25.0	1494.3	0.977	0.312														
26.0	1492.5	0.976	0.218														
27.0	1491.7	0.975	0.218														
28.0	1487.4	0.973	0.247														

Cruise: BARTLT 1301-82      Sample: 77-2      Date: 11/22/81  
 Position: 13-28N; 64-40W      Depth: 3477m  
 Calculated for: 23.0      Deg-C      35.00 o/oo      0 m 400 kHz

Depth (cm)	Vp m/sec	Vp Ratio	Attn. K	% Por.	% CaCO3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1528.6	0.999	0.000													
0.0	1513.4	0.990	0.278													
1.0	1498.9	0.980	0.218													
2.0	1493.0	0.976	0.179													
3.0	1491.2	0.975	0.179													
4.0	1491.2	0.975	0.205													
5.0	1491.2	0.975	0.179													
6.0	1491.2	0.975	0.167													
7.0	1490.8	0.975	0.192													
8.0	1490.8	0.975	0.179													
9.0	1490.8	0.975	0.179													
10.0	1490.1	0.974	0.144													
11.0	1490.1	0.974	0.133													
12.0	1489.7	0.974	0.133													
13.0	1490.8	0.975	0.144													
14.0	1491.2	0.975	0.167													
15.0	1490.8	0.975	0.133													
16.0	1493.0	0.976	0.133													
17.0	1493.0	0.976	0.144													
18.0	1495.6	0.978	0.156													
19.0	1497.4	0.979	0.179													
20.0	1494.8	0.977	0.192													
21.0	1492.6	0.976	0.192													
22.0	1491.5	0.975	0.205													
23.0	1493.7	0.977	0.312													

Cruise: BARTLE 1301-82      Sample: 77-3  
 Position: 13-28N; 64-40W      Date: 11/22/81  
 Calculated for: 23.0 Deg-C      Depth: 3477m  
 0 m 400 kHz

Depth (cm.)	Vp m/sec	Vf m/sec	Attn. k	% Por.	% CaCO3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1527.1	0.998	0.000													
0.0	1522.5	0.995	0.102													
1.0	1504.4	0.984	0.232													5.35
2.0	1493.4	0.976	0.247													
3.0	1492.3	0.976	0.179													
4.0	1490.8	0.975	0.179													
5.0	1490.1	0.974	0.167													25.57
6.0	1489.7	0.974	0.167													
7.0	1489.7	0.974	0.156													49.95
8.0	1490.1	0.974	0.167													
9.0	1490.1	0.974	0.167													
10.0	1490.1	0.974	0.218													71.95
11.0	1490.1	0.974	0.192													
12.0	1489.3	0.974	0.133													
13.0	1488.3	0.973	0.123													126.60
14.0	1488.3	0.973	0.123													
15.0	1490.4	0.975	0.144													
16.0	1494.1	0.977	0.167													159.37
17.0	1493.0	0.976	0.156													
18.0	1494.5	0.977	0.144													
19.0	1492.3	0.976	0.156													
20.0	1490.1	0.974	0.156													
21.0	1487.2	0.972	0.167													
22.0	1493.0	0.976	0.294													
23.0	1512.6	0.989	1.211													114.77
24.0	1503.3	0.983	0.531													
25.0	1493.7	0.977	0.409													68.38
26.0	1492.3	0.976	0.349													

Cruise: BARTLI 1301-82 Position: 13-33N;64-43W  
 Calculated for: 23.0 Deg-C 35.00 o/oo

Date: 11/22/81 Depth: 3495m  
 0 m 400 kHz

Depth (cm.)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. K	% Caco <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	Mean Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1528.6	1.000	0.000												
0.0	1518.5	0.993	0.167												
1.0	1494.6	0.977	0.167												
2.0	1492.4	0.976	0.167												
3.0	1491.3	0.975	0.167												
4.0	1491.0	0.975	0.179												
5.0	1489.9	0.974	0.192												
6.0	1489.9	0.974	0.205												
7.0	1490.6	0.975	0.192												
8.0	1491.3	0.975	0.205												
9.0	1490.6	0.975	0.205												
10.0	1491.3	0.975	0.218												
11.0	1489.5	0.974	0.262												
12.0	1489.5	0.974	0.144												
13.0	1488.1	0.973	0.153												
14.0	1488.1	0.973	0.123												
15.0	1489.5	0.974	0.144												
16.0	1491.7	0.975	0.179												
17.0	1493.5	0.977	0.205												
18.0	1494.3	0.977	0.247												
19.0	1497.2	0.979	0.312												
20.0	1496.1	0.978	0.278												
21.0	1493.0	0.976	0.218												
22.0	1493.2	0.976	0.205												
23.0	1497.2	0.979	0.294												
24.0	1512.1	0.989	0.876												
25.0	1496.5	0.978	0.330												
26.0	1492.8	0.976	0.232												
27.0	1500.2	0.981	0.675												
28.0	1500.2	0.981	0.717												

Cruise: BAFTLT 1301-82      Sample: 79-9  
 Position: 13-33N; 64-43W      Depth: 3495m  
 Calculated for: 23.0 Deg-C      0 m 400 kHz

Depth (cm)	$v_F$ m/sec	$v_P$ m/sec	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1528.2	0.999	0.015													
0.0	1526.3	0.998	0.048													
1.6	1503.7	0.983	0.179													
2.0	1495.5	0.978	0.205													
3.0	1493.7	0.977	0.218													6.54
4.0	1491.9	0.975	0.205													
5.0	1491.9	0.975	0.218													
6.0	1493.7	0.977	0.218													
7.0	1493.0	0.976	0.232													
8.0	1492.6	0.976	0.232													
9.0	1490.8	0.975	0.218													
10.0	1490.0	0.974	0.179													
11.0	1489.0	0.974	0.156													
12.0	1490.4	0.975	0.167													
13.0	1491.9	0.975	0.312													
14.0	1490.0	0.974	0.167													
15.0	1490.0	0.974	0.144													
16.0	1489.3	0.974	0.144													
17.0	1492.2	0.976	0.156													101.09
18.0	1491.5	0.975	0.144													
19.0	1494.1	0.977	0.179													95.15
20.0	1493.0	0.976	0.205													
21.0	1493.0	0.976	0.218													
22.0	1493.3	0.976	0.218													
23.0	1492.6	0.976	0.205													110.01
24.0	1461.1	0.955	0.232													
25.0	1491.1	0.975	0.247													71.35

Cruise: BARTLT 1301-82      Sample: 79-18      Date: 11/22/81  
 Position: 13-33N; 64-43W      Depth: 3495m  
 Calculated for: 23.0 Deg-C      0 m      400 kHz

Depth (cm)	$V_p$ m/sec	Attn. k	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	Kurt
1.0	0.535	0.109													
2.0															
3.0															
4.0															
5.0	0.463	0.106													

Cruise: BARTLA 1301-82      Sample: 80-2      Date: 11/23/81  
 Position: 13-32N; 64-32W      Depth: 3429m  
 Calculated for: 23.0 Deg-C      0 m 400 kHz

Cruise: BARTLT 1301-82  
 Position: 13-35N;64-40W  
 Calculated for: 23.0 Deg-C

Date: 11/23/81  
 Depth: 3433m  
 0 m 400 kHz

Sample: 82-1  
 35.00 o/oo

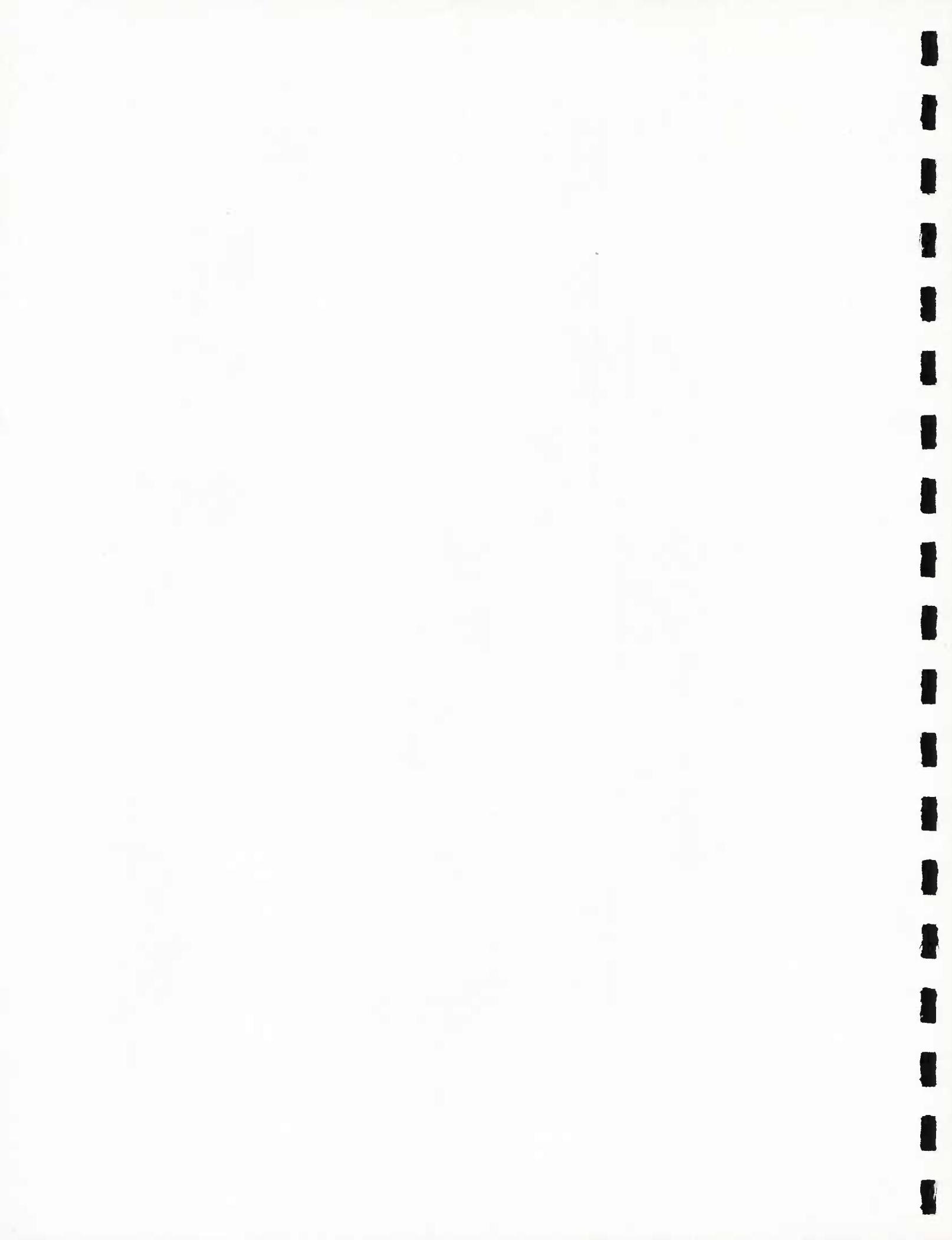
Depth (cm)	vP m/sec	vP Ratio	Attn. k	% Por.	% CaCO3	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1528.2	0.999	0.000													
0.0	1527.1	0.998	0.031													
1.0	1506.7	0.985	0.312													
2.0	1496.3	0.978	0.192													
3.0	1494.1	0.977	0.192													
4.0	1492.2	0.976	0.205													
5.0	1492.2	0.976	0.192													
6.0	1492.2	0.976	0.192													
7.0	1492.2	0.976	0.192													
8.0	1491.5	0.975	0.218													
9.0	1491.5	0.975	0.391													
10.0	1498.1	0.980	1.131													
11.0	1498.5	0.980	0.370													
12.0	1495.2	0.978	0.247													
13.0	1492.6	0.976	0.247													
14.0	1491.5	0.975	0.330													
15.0	1490.6	0.975	0.247													
16.0	1490.0	0.974	0.218													
17.0	1491.5	0.975	0.247													
18.0	1490.8	0.975	0.218													
19.0	1491.9	0.975	0.192													
20.0	1495.5	0.978	0.218													
21.0	1497.0	0.979	0.247													
22.0	1494.4	0.977	0.218													
23.0	1495.5	0.978	0.247													
24.0	1494.8	0.977	0.218													

Cruise: BARTLT 1301-82  
 Position: 13-35N; 64-40W  
 Calculated for: 23.0 Deg-C

Date: 11/23/81  
 Depth: 3433m  
 0 m 400 kHz

Sample: 82-2  
 35.00 o/oo

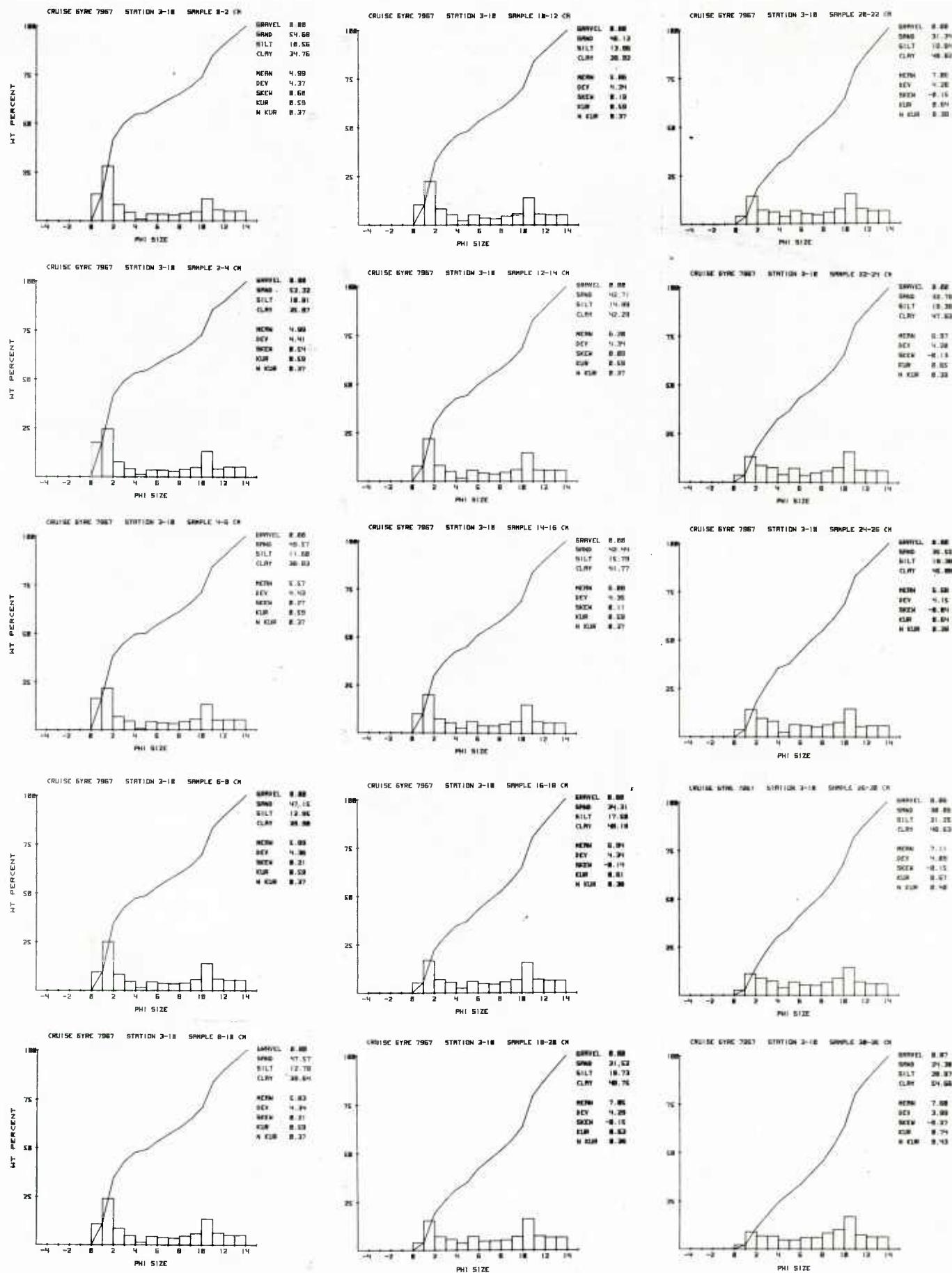
Depth (cm)	V <sub>P</sub> m/sec	V <sub>P</sub> Ratio	Attn. K	% Por.	% CaCO <sub>3</sub>	% C	% N	Shear Str.	% Sand	% Silt	% Clay	Mean Phi	Dev	Skew	Kurt	N. Kurt
WATER	1528.5	0.999	0.000													
0.0	1514.0	0.990	0.144													
1.0	1502.1	0.982	0.247													
2.0	1495.4	0.978	0.179													
3.0	1493.2	0.976	0.192													
4.0	1492.8	0.976	0.218													
5.0	1492.5	0.976	0.205													
6.0	1491.4	0.975	0.205													
7.0	1490.3	0.974	0.167													
8.0	1489.2	0.974	0.144													
9.0	1490.6	0.975	0.144													
10.0	1491.0	0.975	0.167													
11.0	1490.6	0.975	0.167													
12.0	1499.5	0.980	0.482													
13.0	1511.4	0.988	0.656													
14.0	1505.0	0.984	0.885													
15.0	1500.2	0.981	0.791													
16.0	1495.0	0.978	0.349													
17.0	1492.1	0.976	0.262													
18.0	1492.8	0.976	0.218													
19.0	1493.6	0.977	0.167													
20.0	1496.5	0.979	0.247													
21.0	1494.3	0.977	0.247													
22.0	1491.4	0.975	0.218													
23.0	1492.5	0.976	0.330													

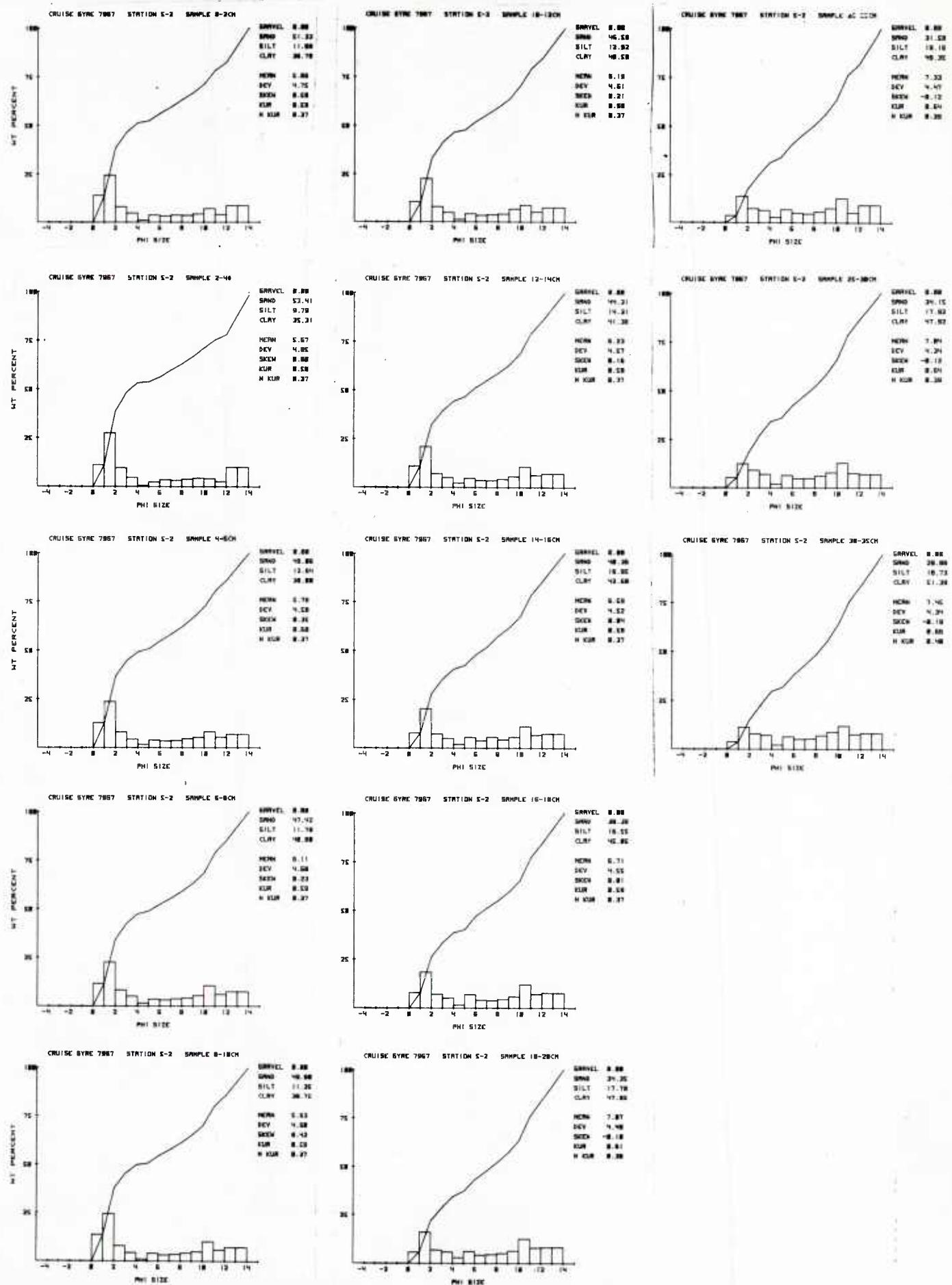


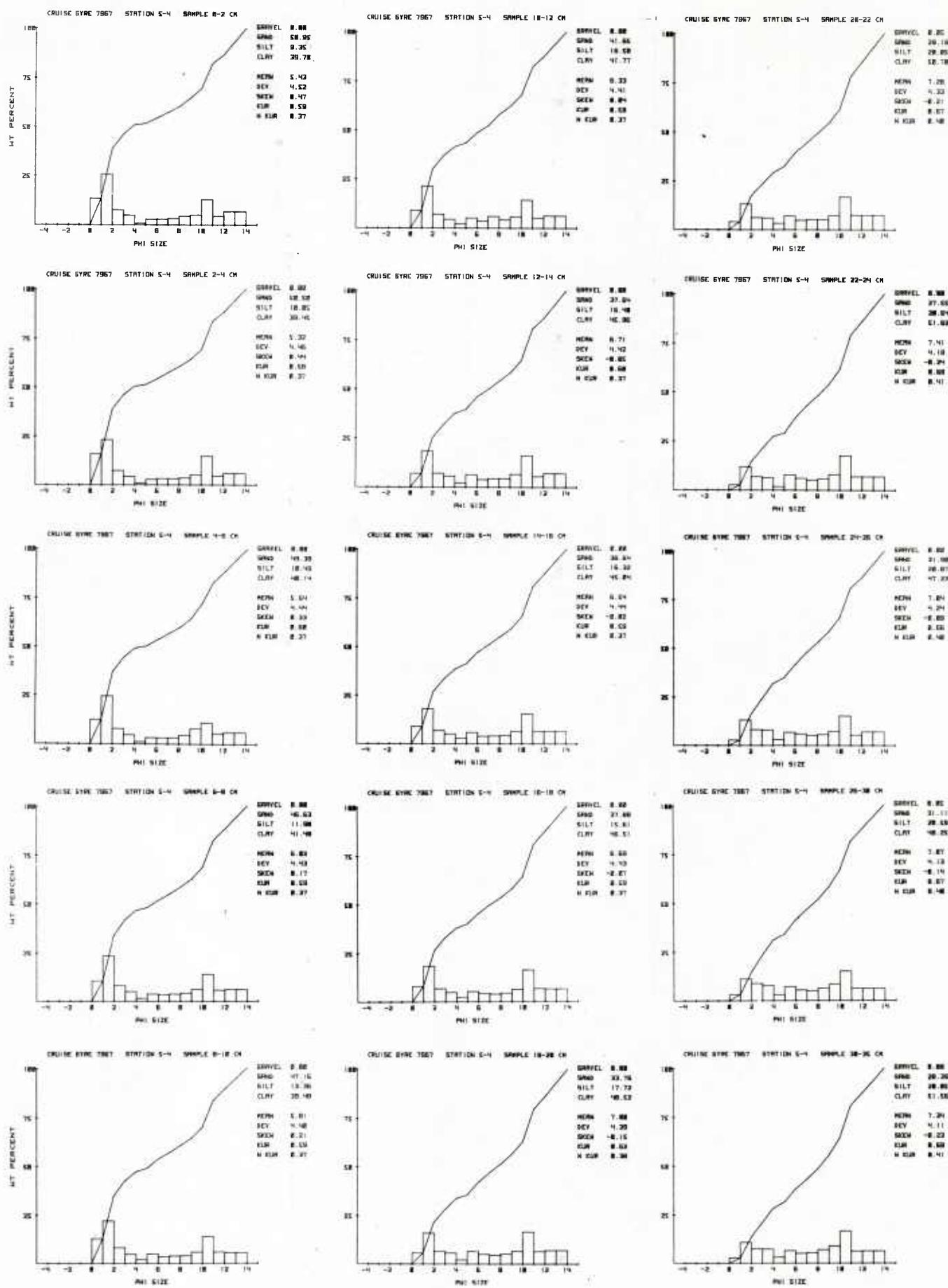
APPENDIX B  
 FREQUENCY HISTOGRAMS OF GRAIN SIZE DISTRIBUTION DATA  
 FOR SEDIMENTS COLLECTED IN BOX CORES FROM THE VENEZUELA BASIN

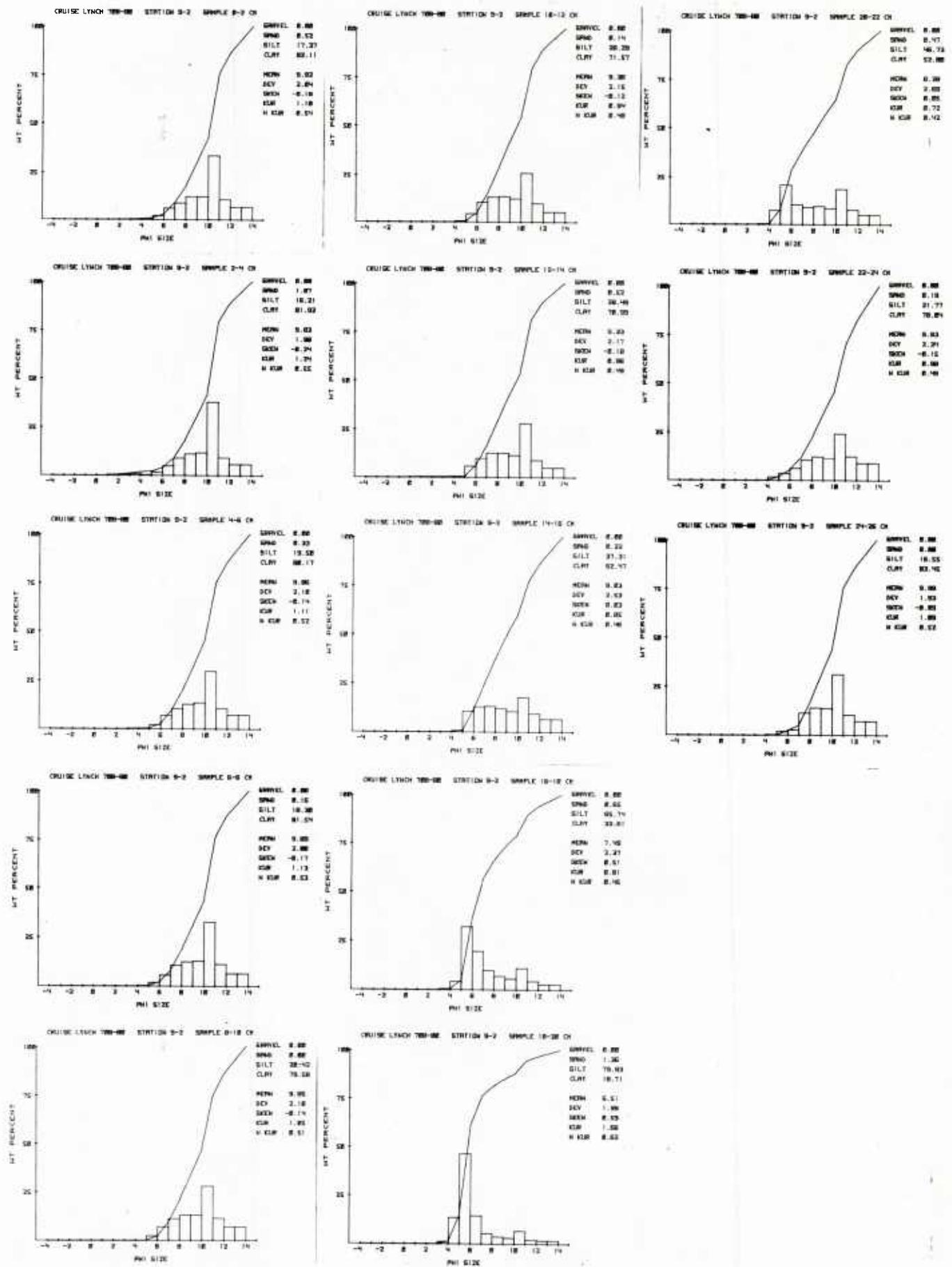
Grain size data are plotted as weight percent histograms and cumulative weight curves for phi sizes -4 through 14. Also included are percentage gravel, sand, silt, and clay and Folk and Ward's mean phi, standard deviation, skewness, kurtosis, and normalized kurtosis. Data include three stations from location 1, five stations from location 2, three stations from location 3, three stations along a transect from location 1 to location 2, and five stations along a transect from location 2 to location 3.

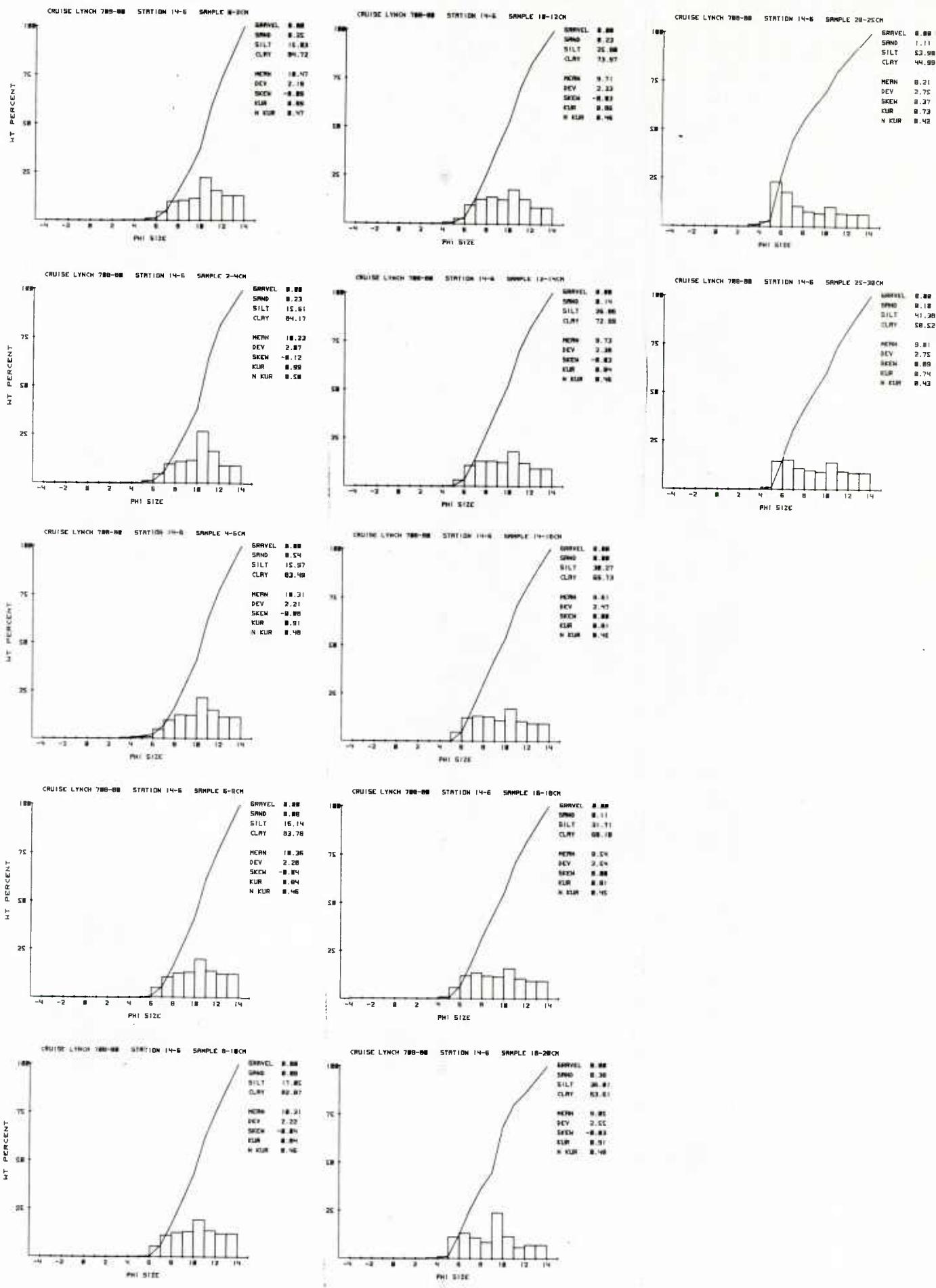
<u>Station</u>	<u>Subcore</u>	<u>Sample</u>	<u>Page</u>
3	10	0-35	200
5	2	0-35	201
5	4	0-35	202
9	2	0-26	203
14	6	0-30	204
14	9	0-30	205
14	9	30-34	206
17	1	0-30	207
17	3	0-28	208
18	1	0-24	209
26	2	0-30	210
26	2	30-38	211
42	11	0-30	212
42	11	30-33	213
43	15	0-30	214
43	15	30-32	215
44	12	0-30	216
44	12	30-36	217
51	3	0-16	218
51	5	14-42	219
53	19	0-16	220
53	21	16-38	221
54	4	0-22	222
54	2	20-42	223
67	1	0-30	224
67	1	30-38	225
68	3	0-30	226
69	9	0-28	227
70	11	0-25.5	228
71	10	0-22	229
80	2	0-30	230
80	2	30-31	231

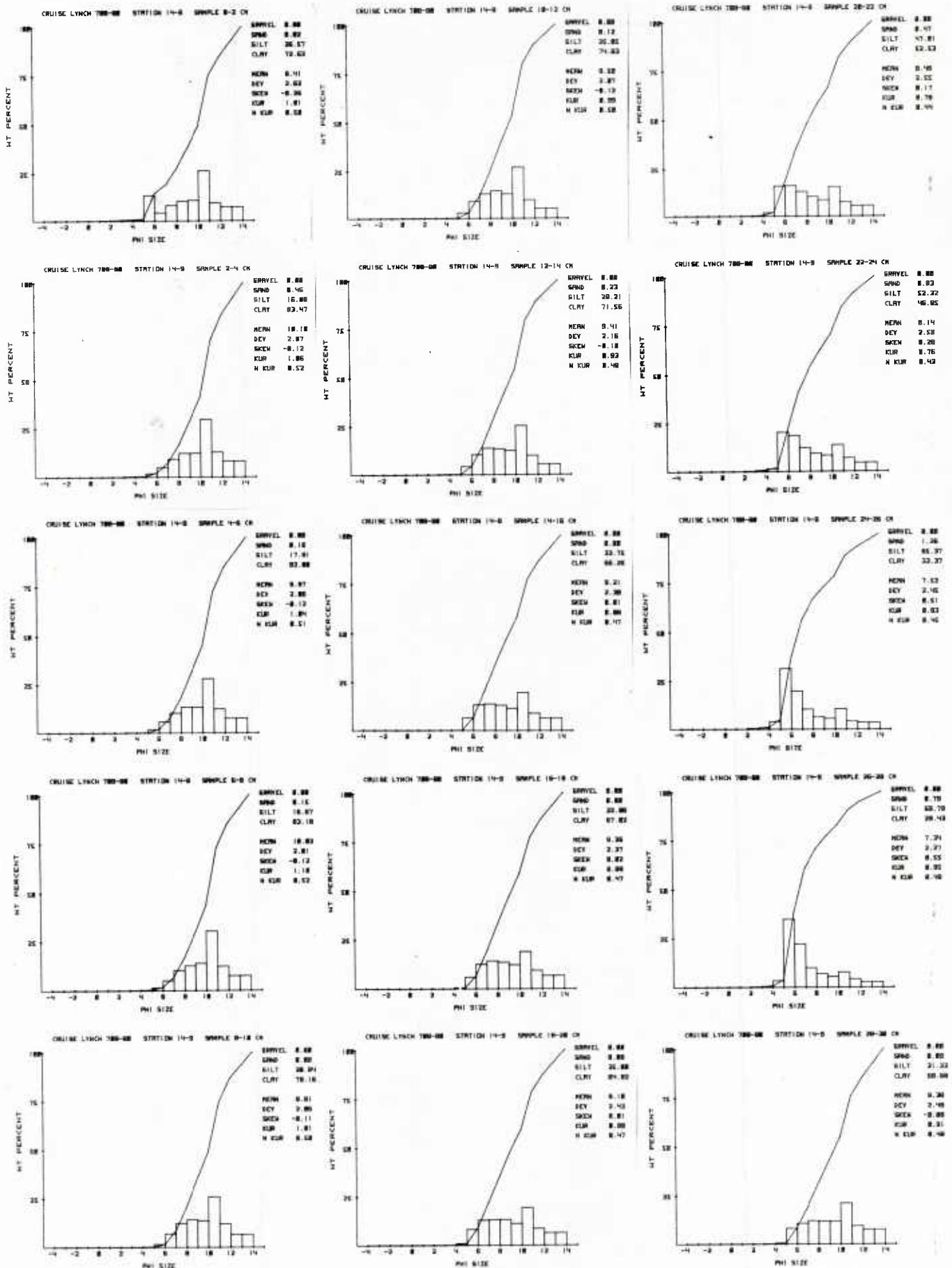


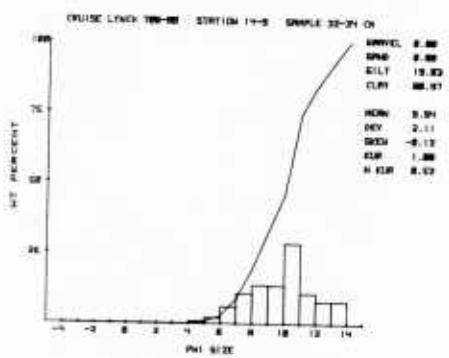
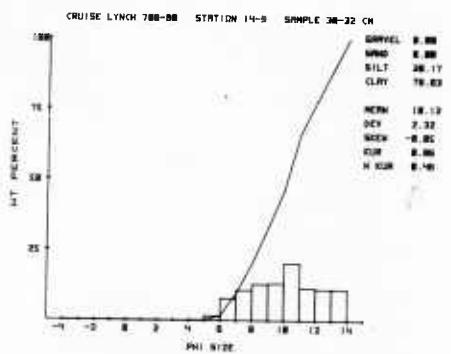


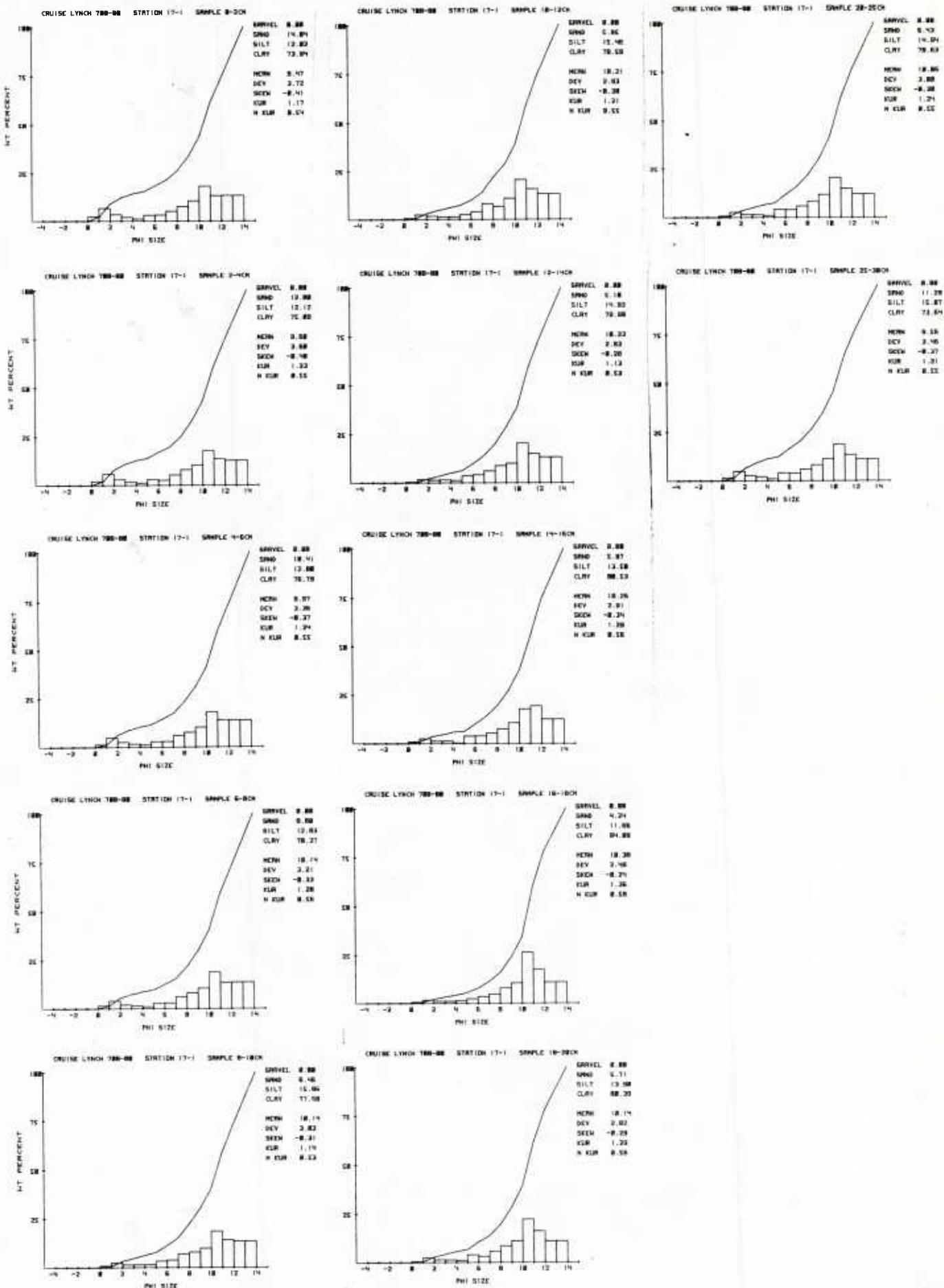


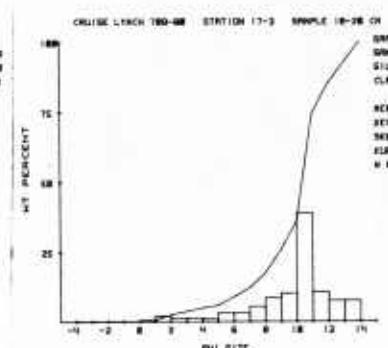
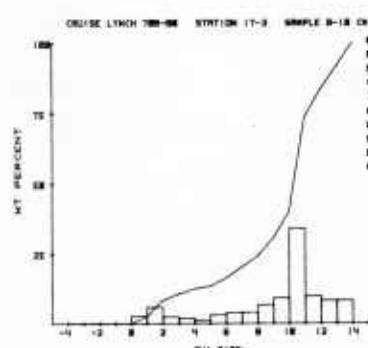
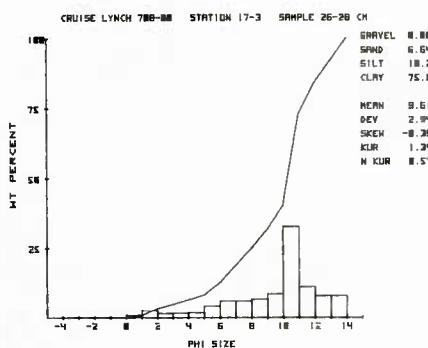
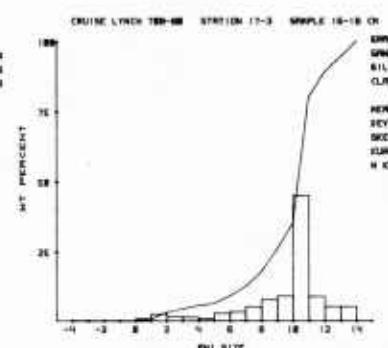
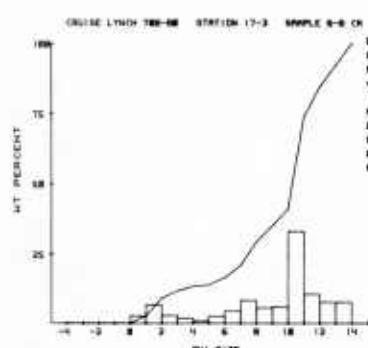
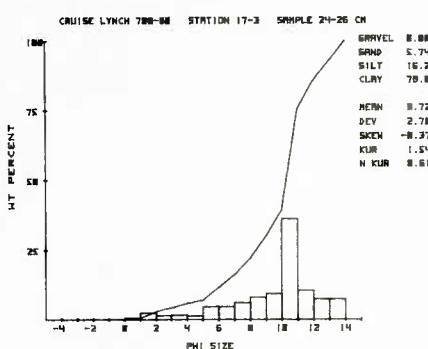
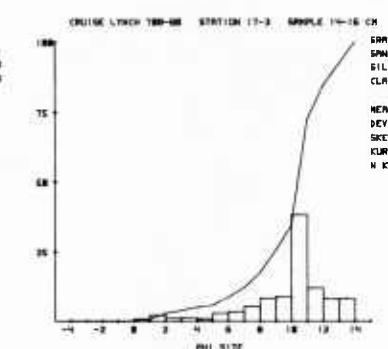
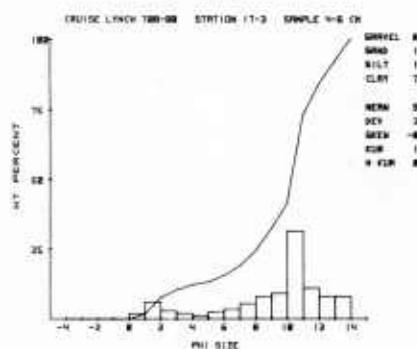
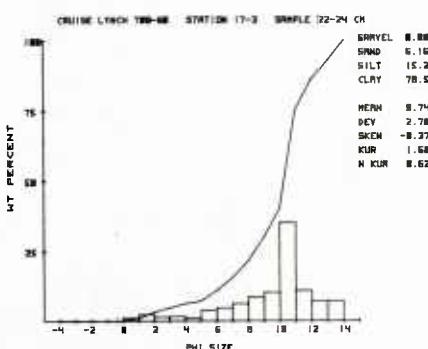
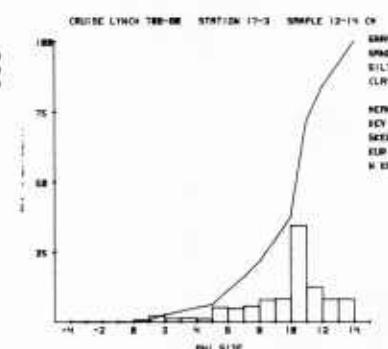
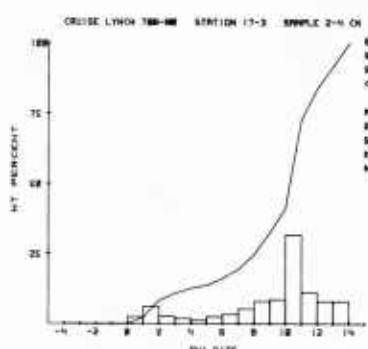
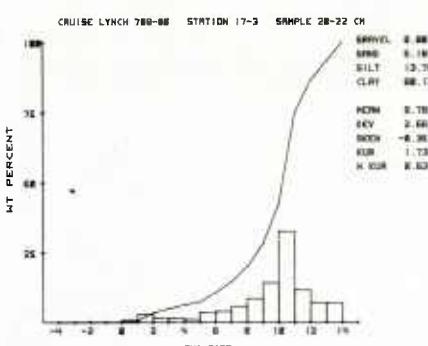
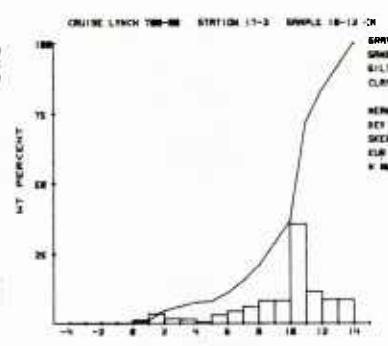
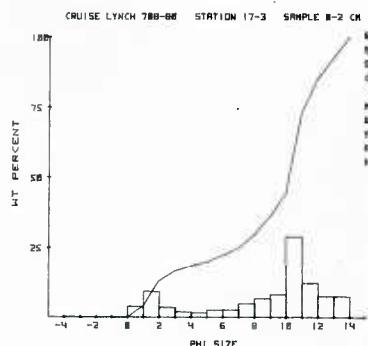


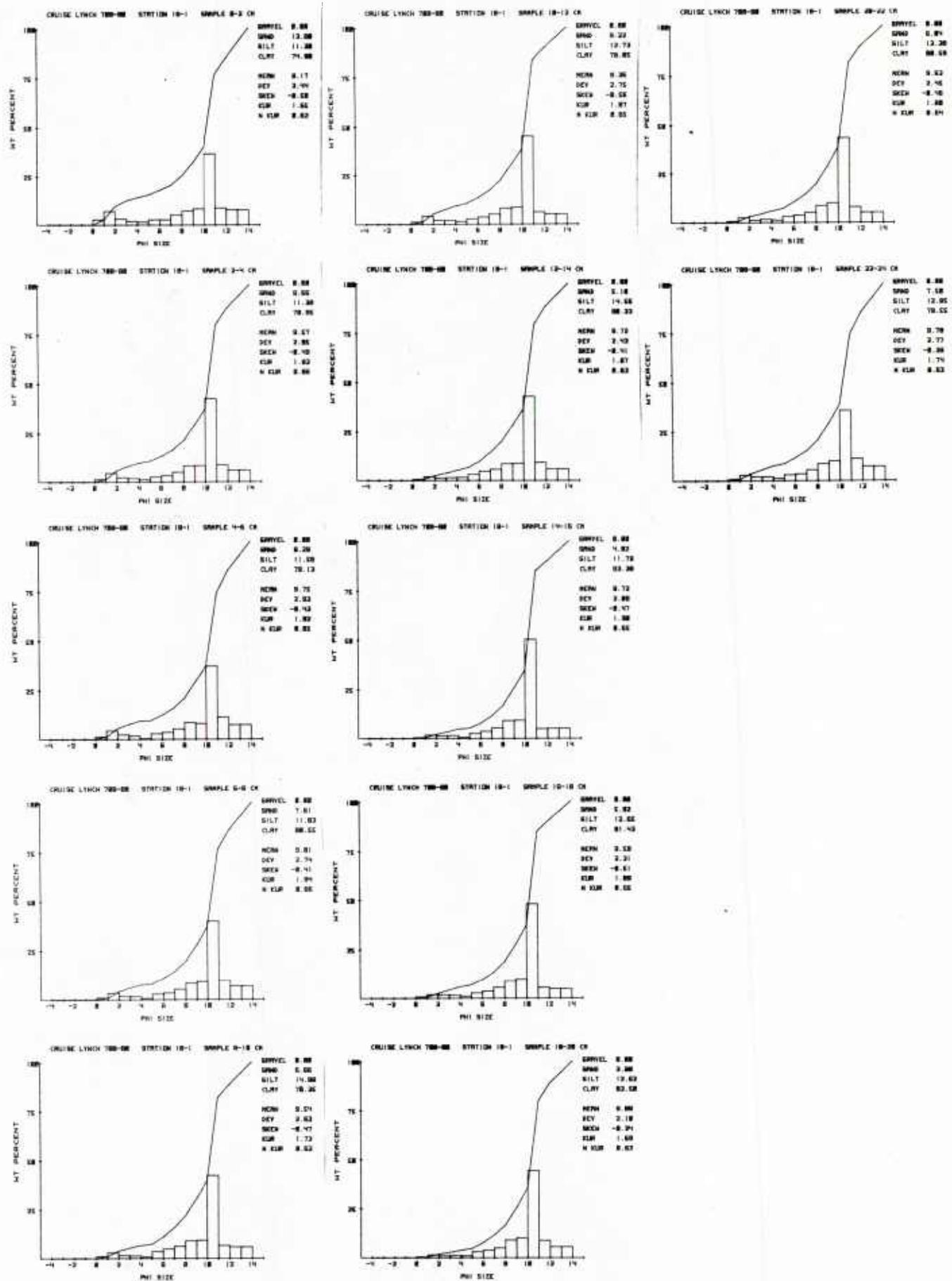


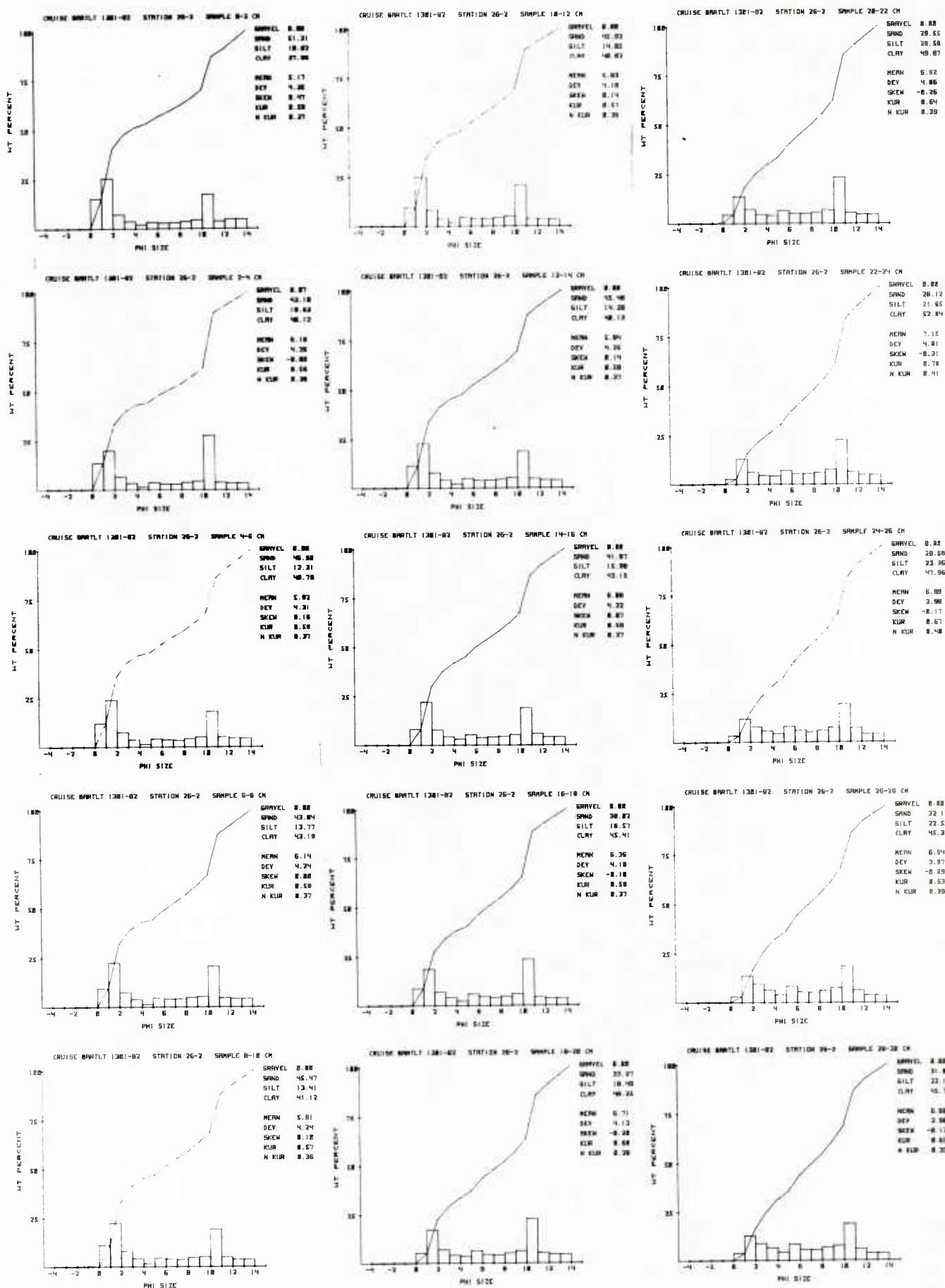


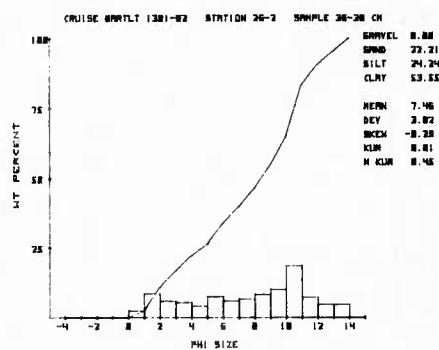
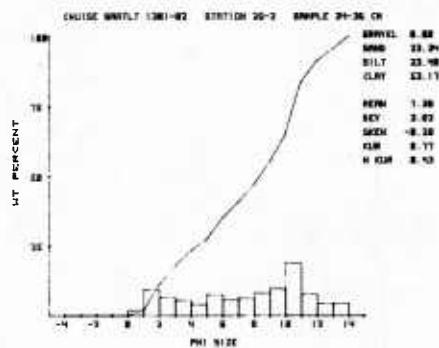
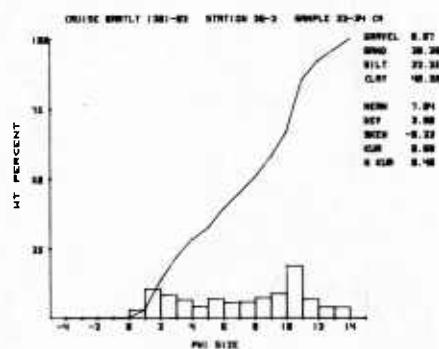
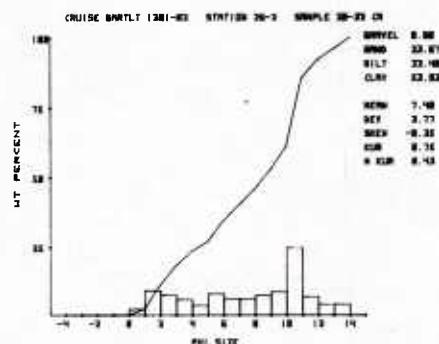


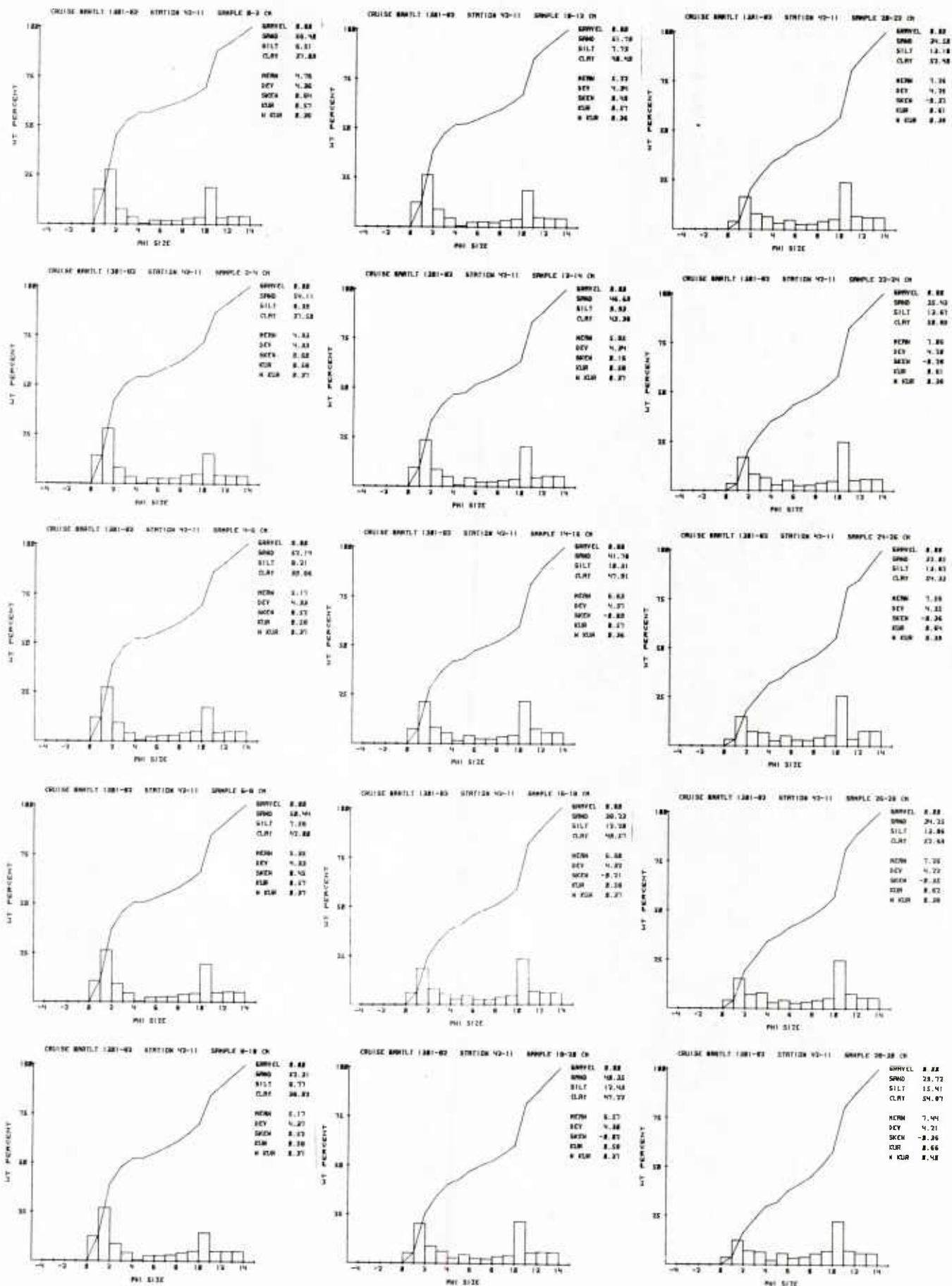


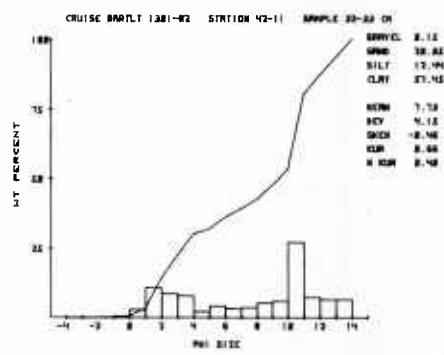
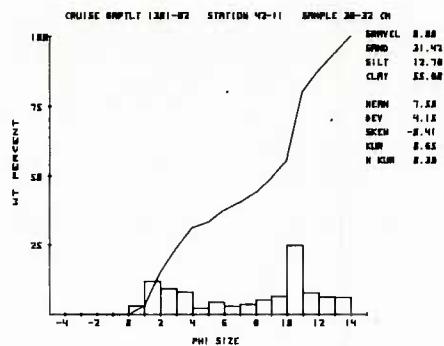


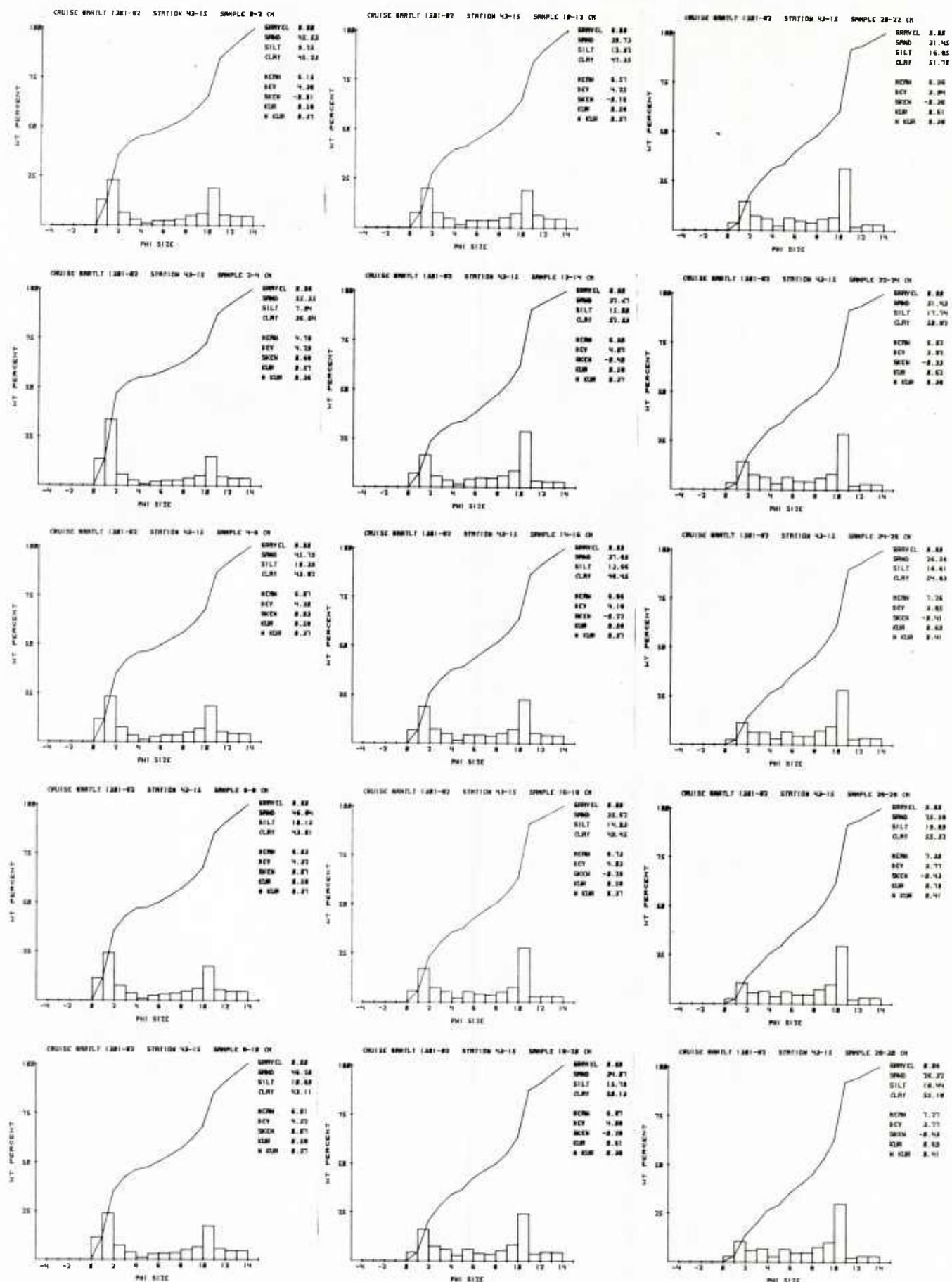


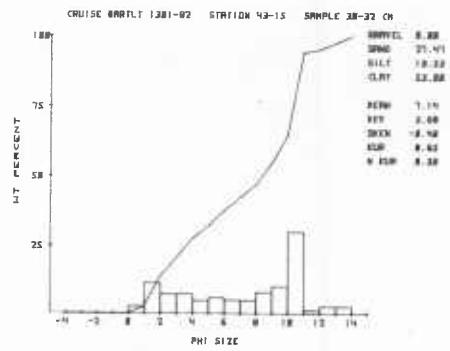


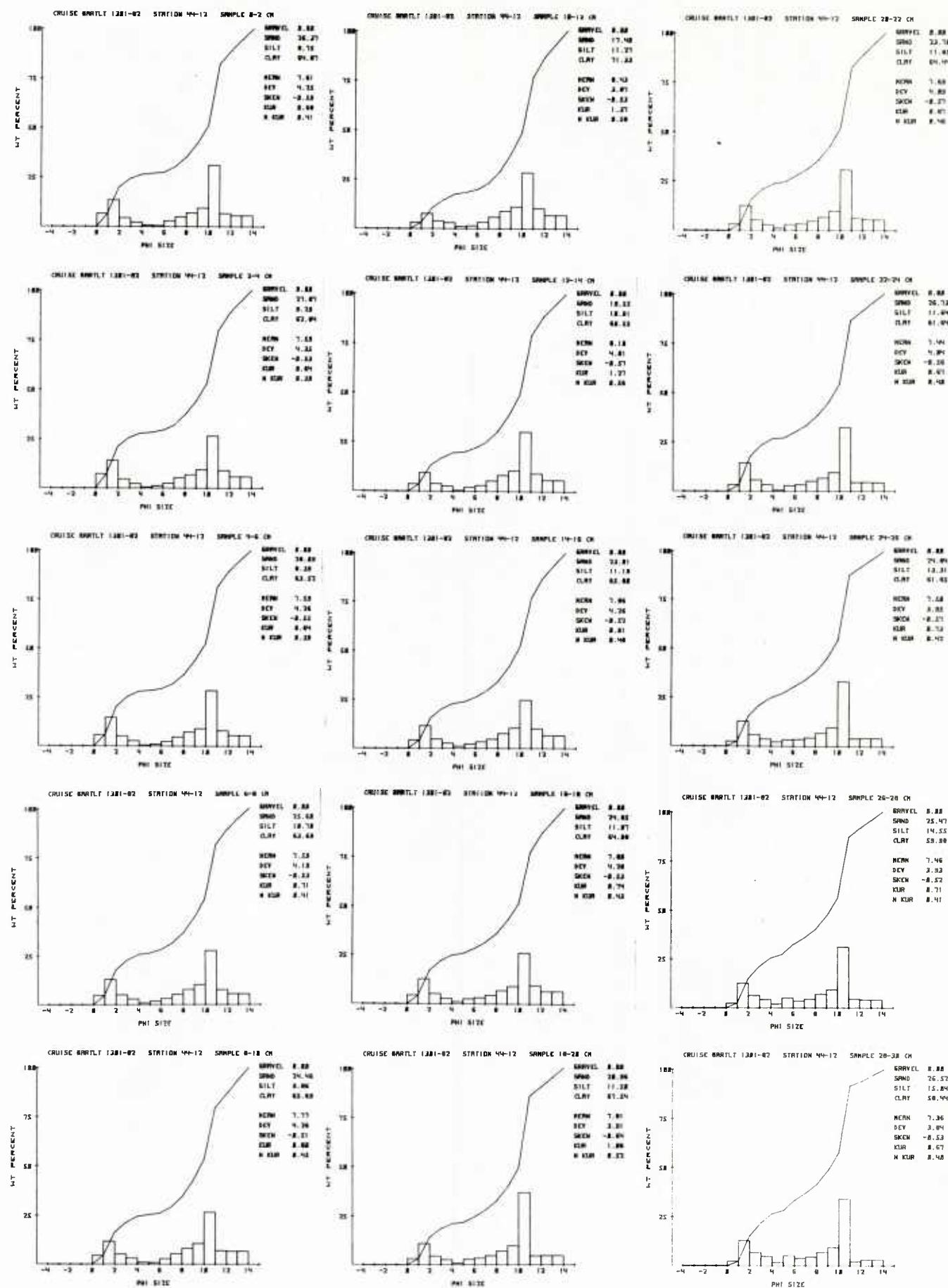


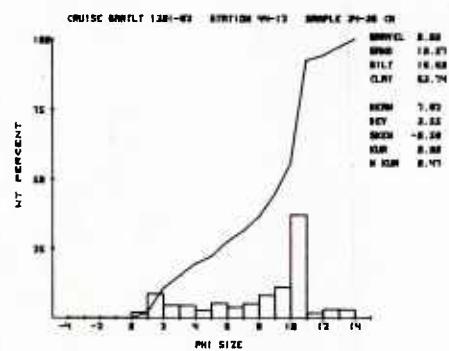
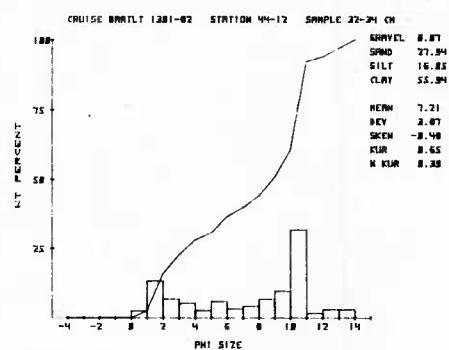
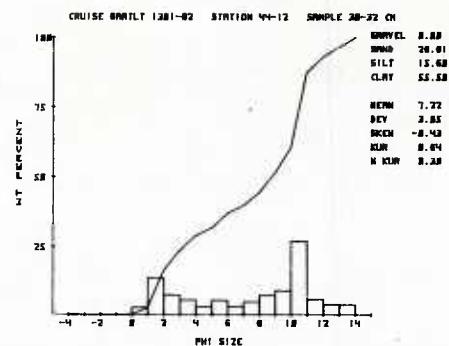


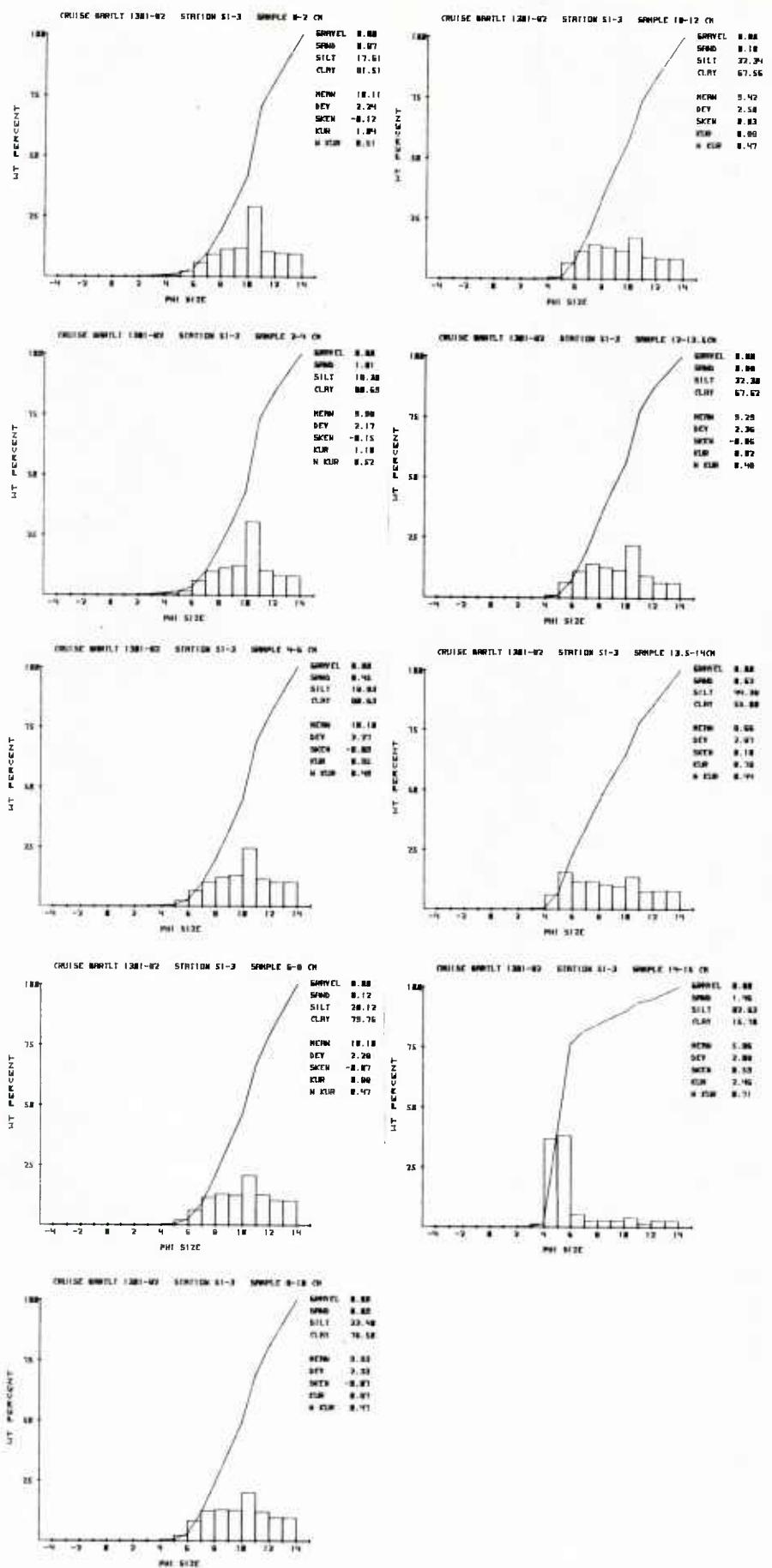


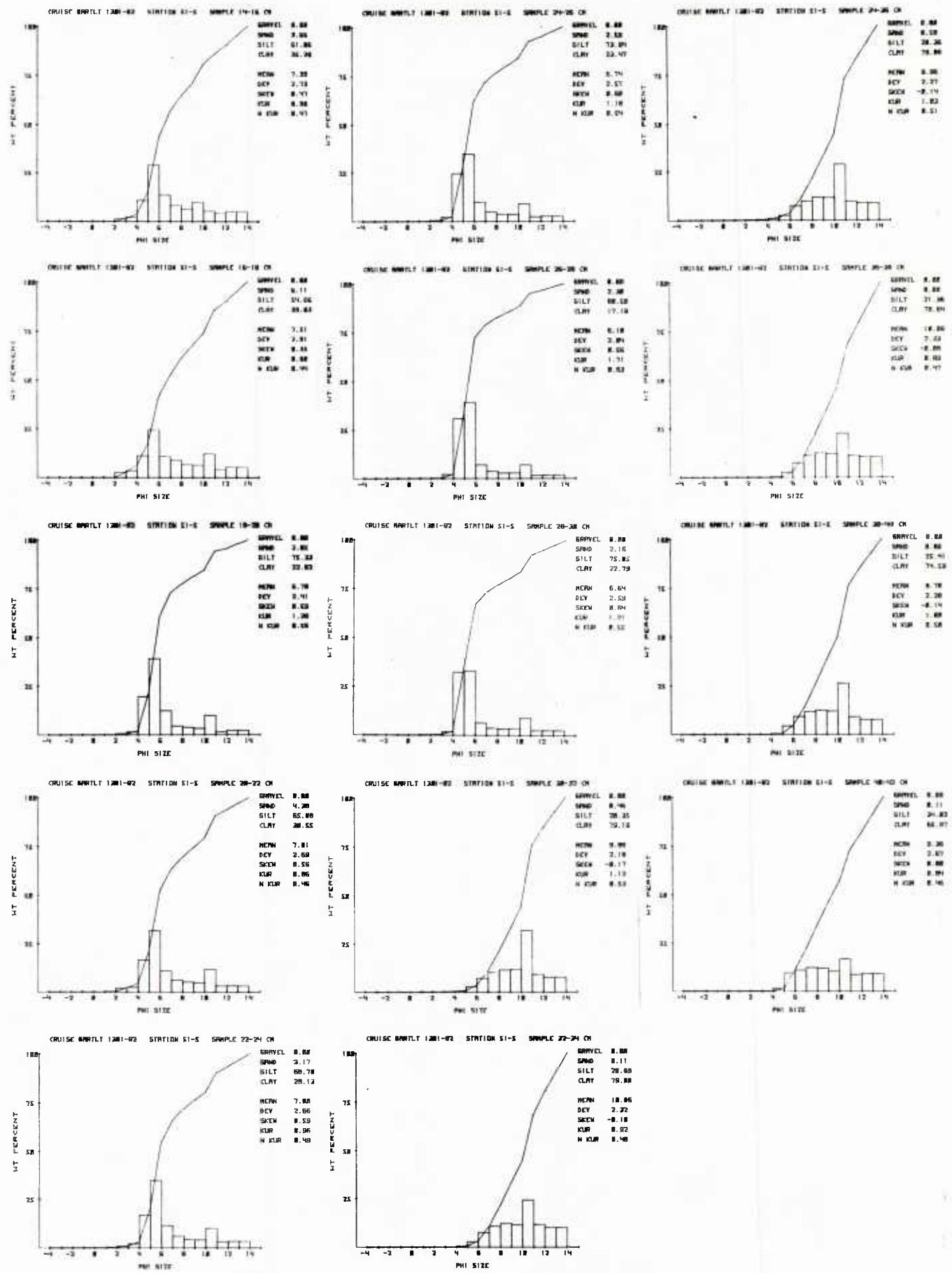


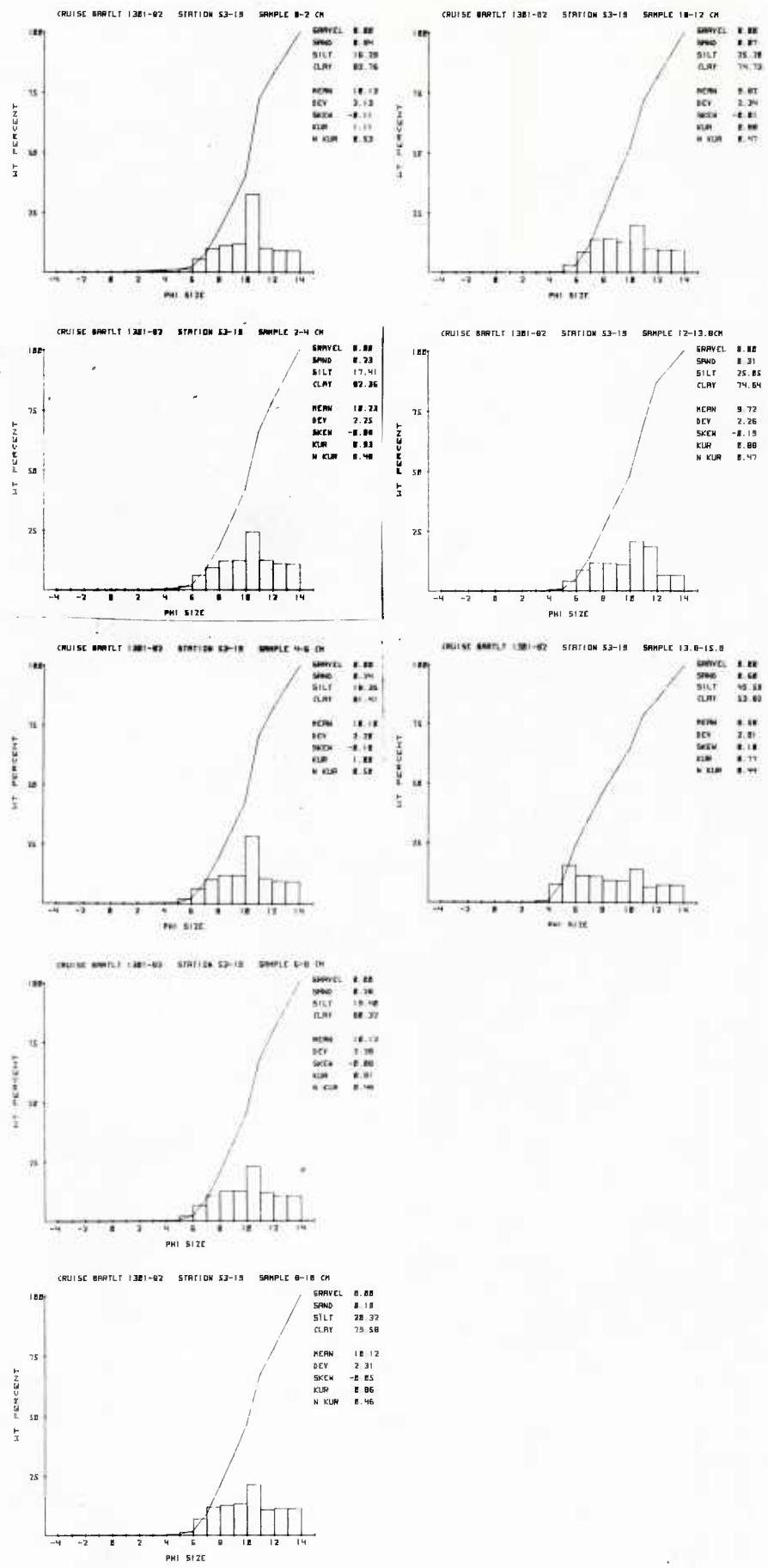


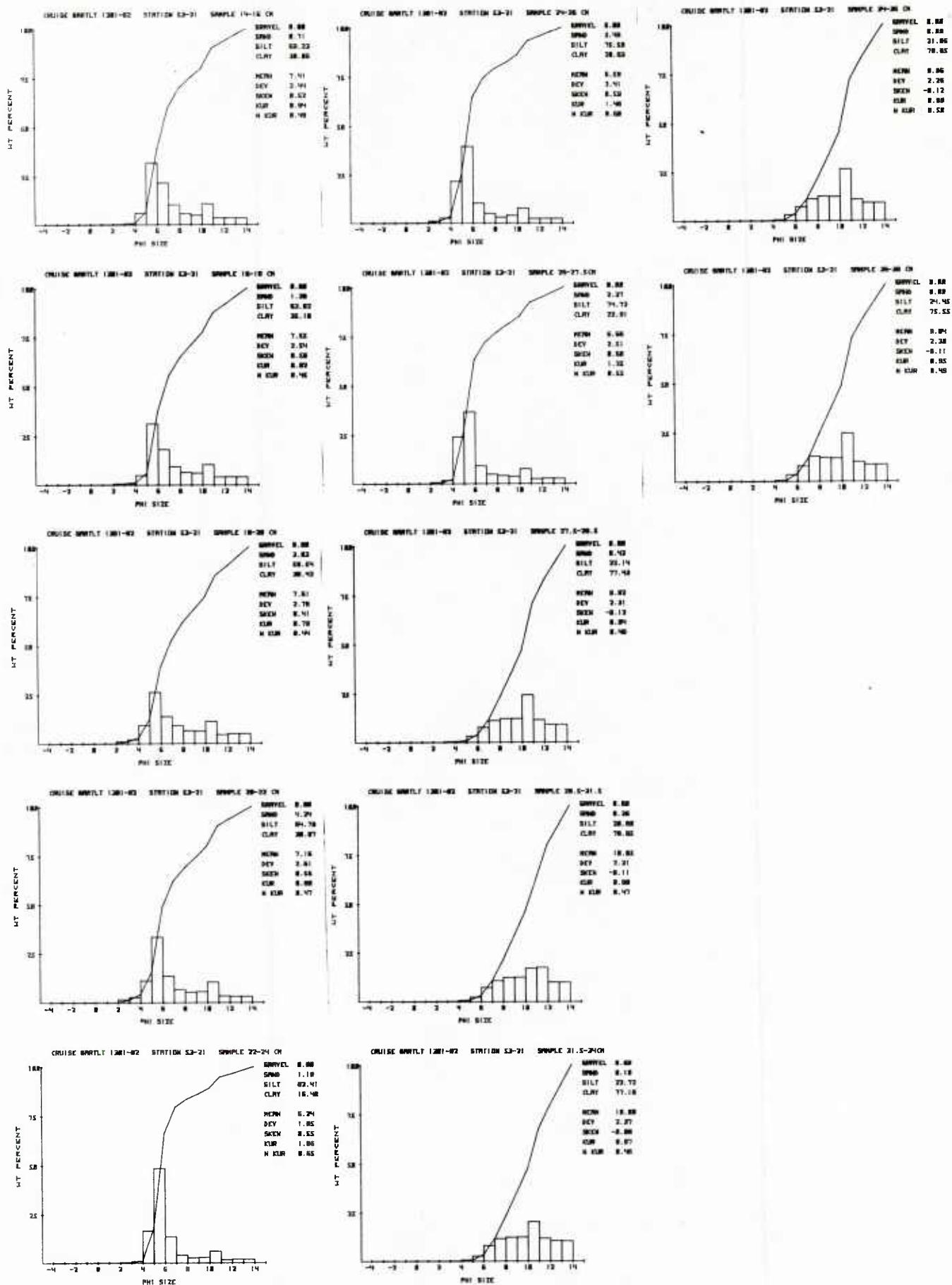


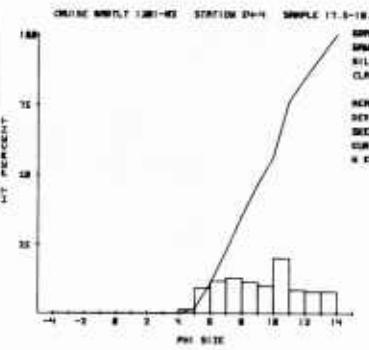
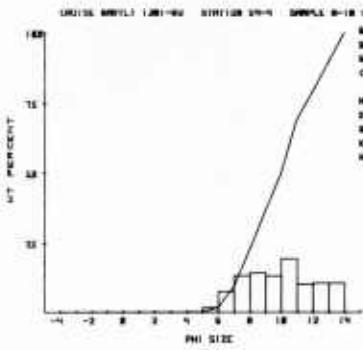
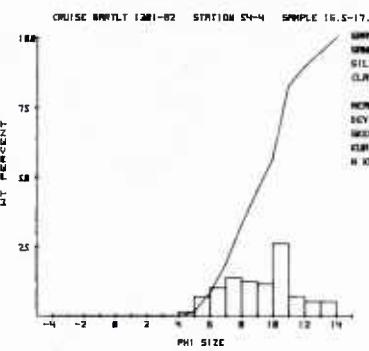
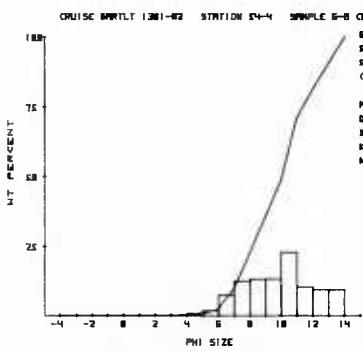
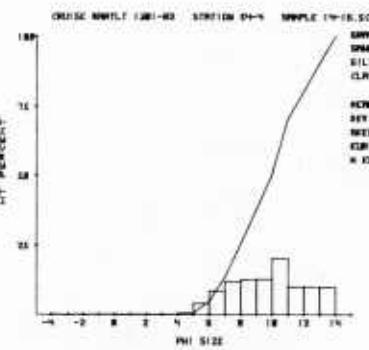
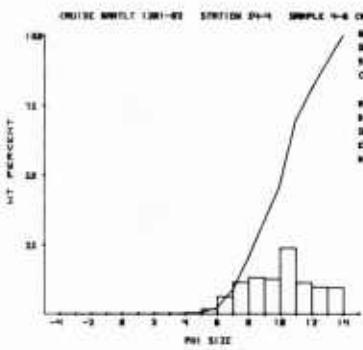
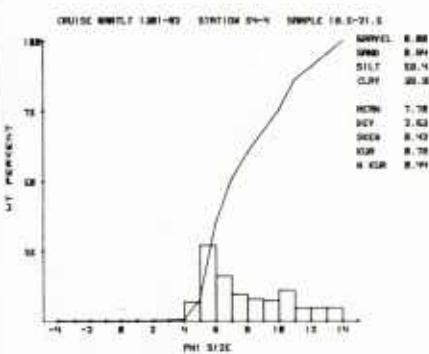
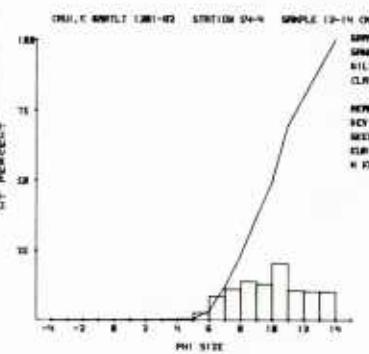
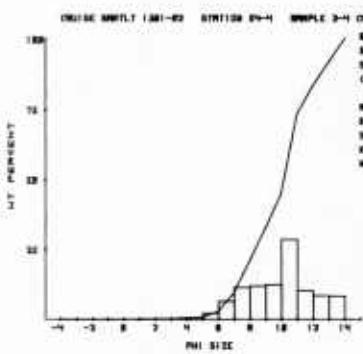
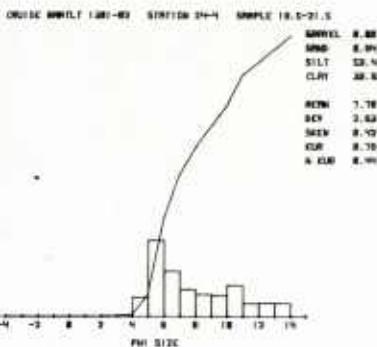
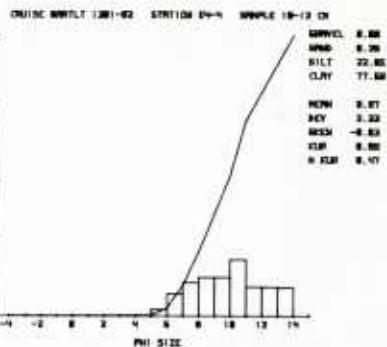
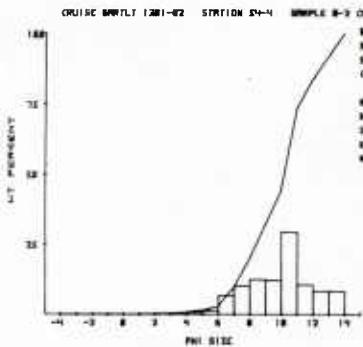


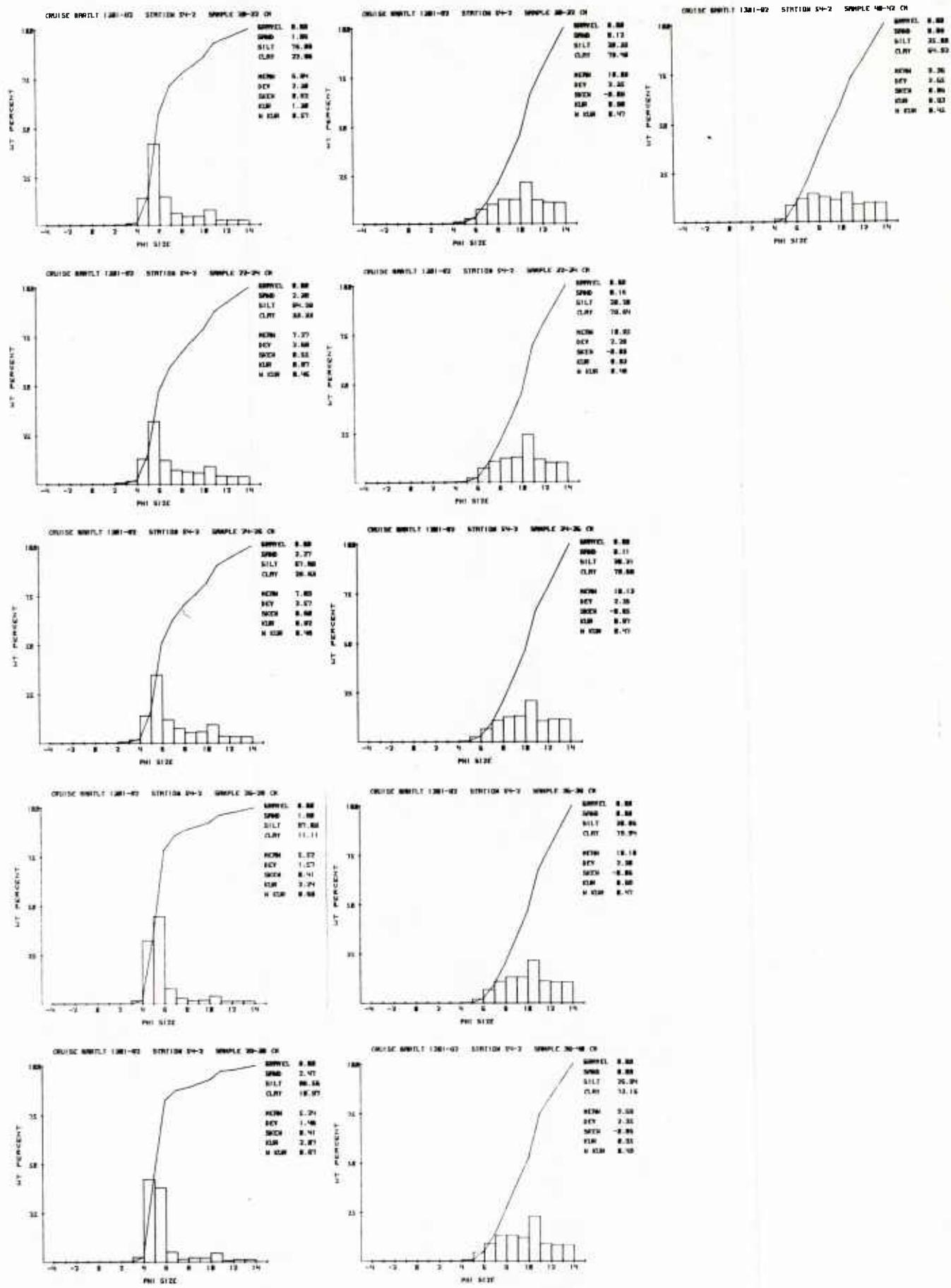


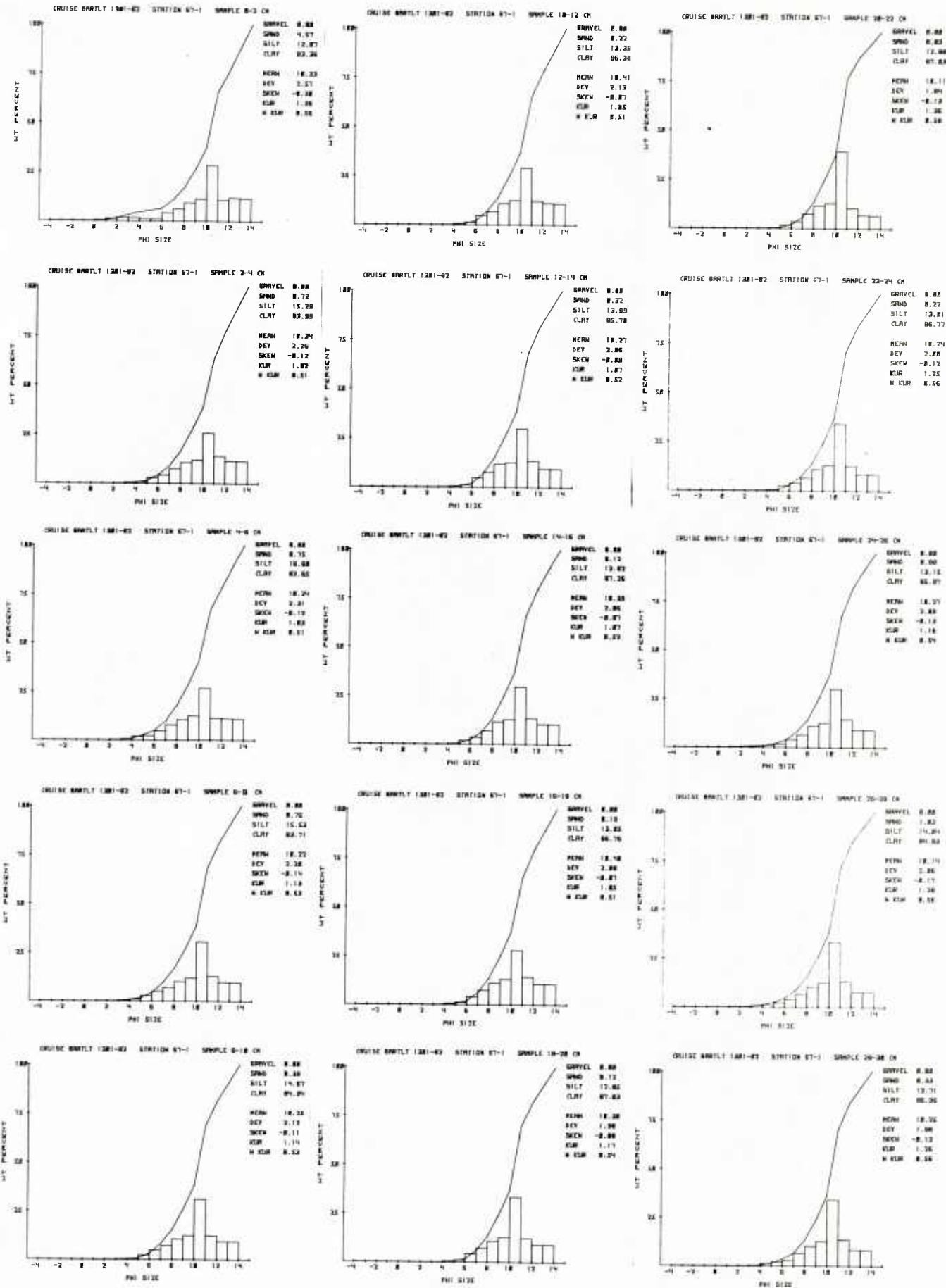


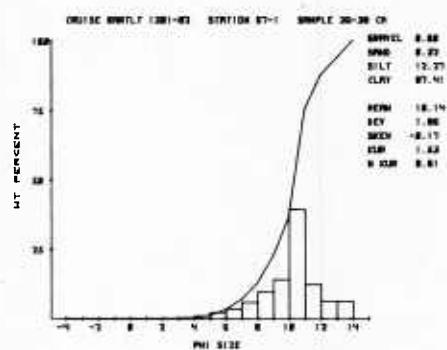
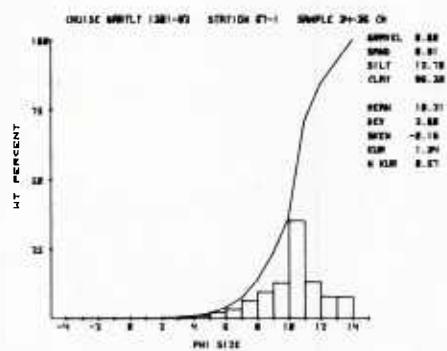
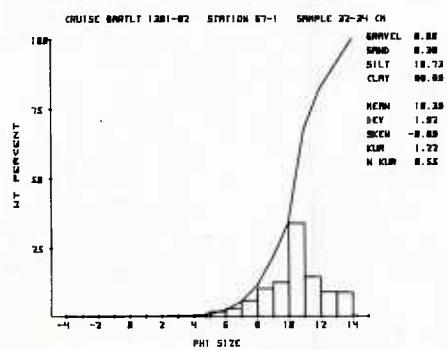
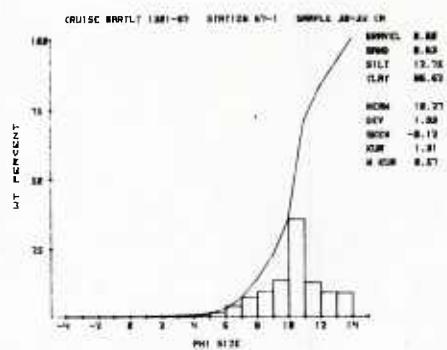


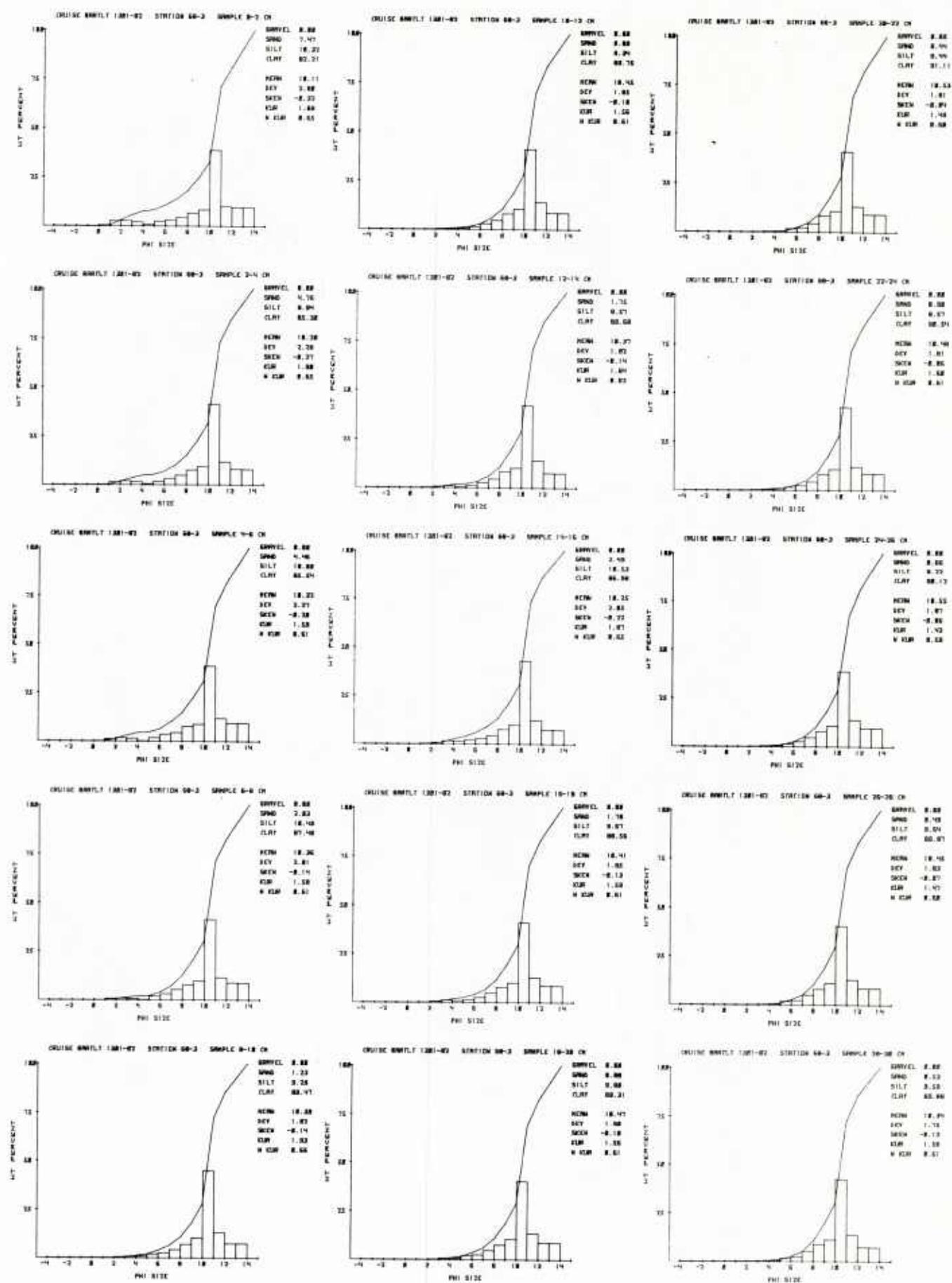


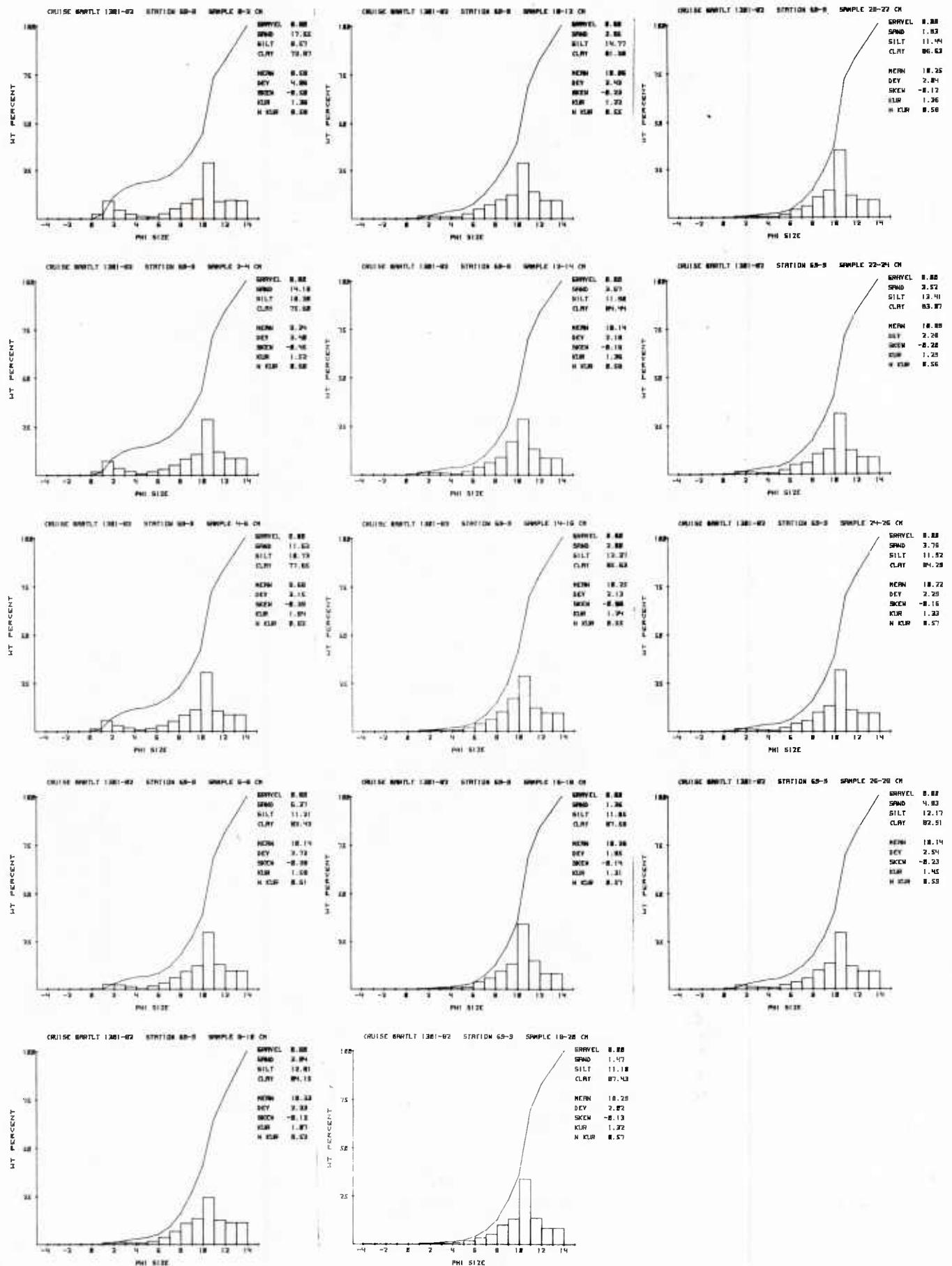


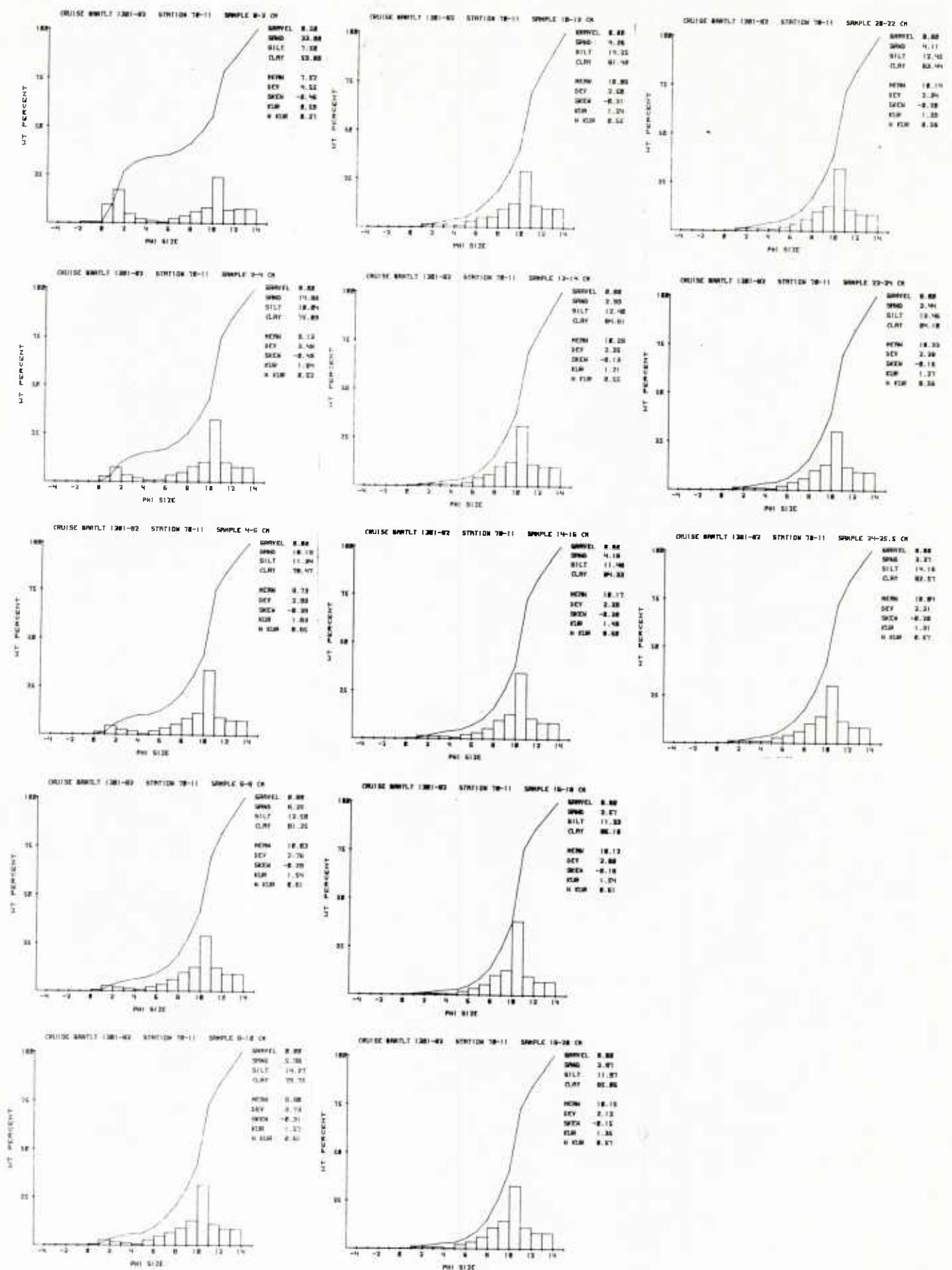


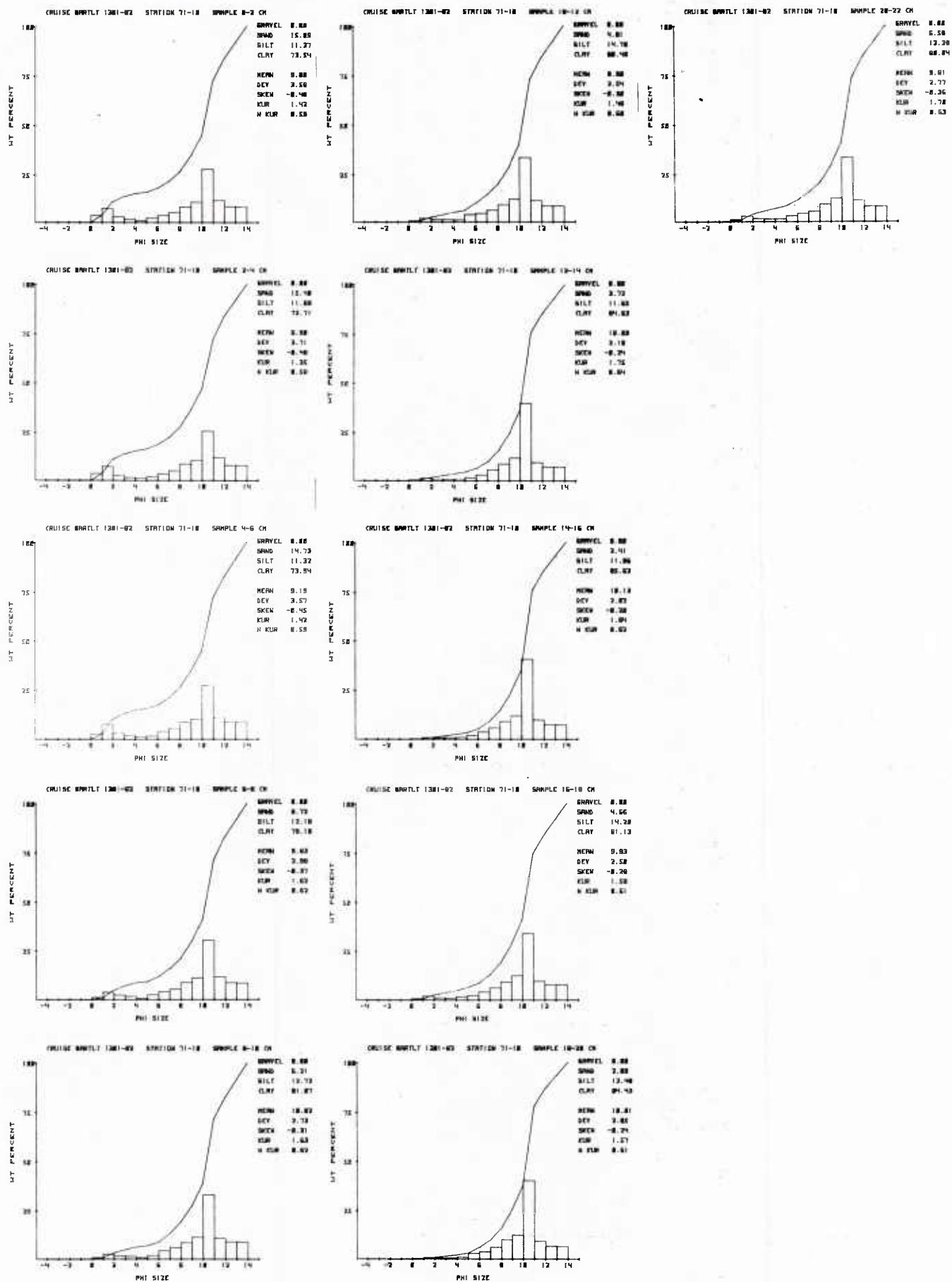


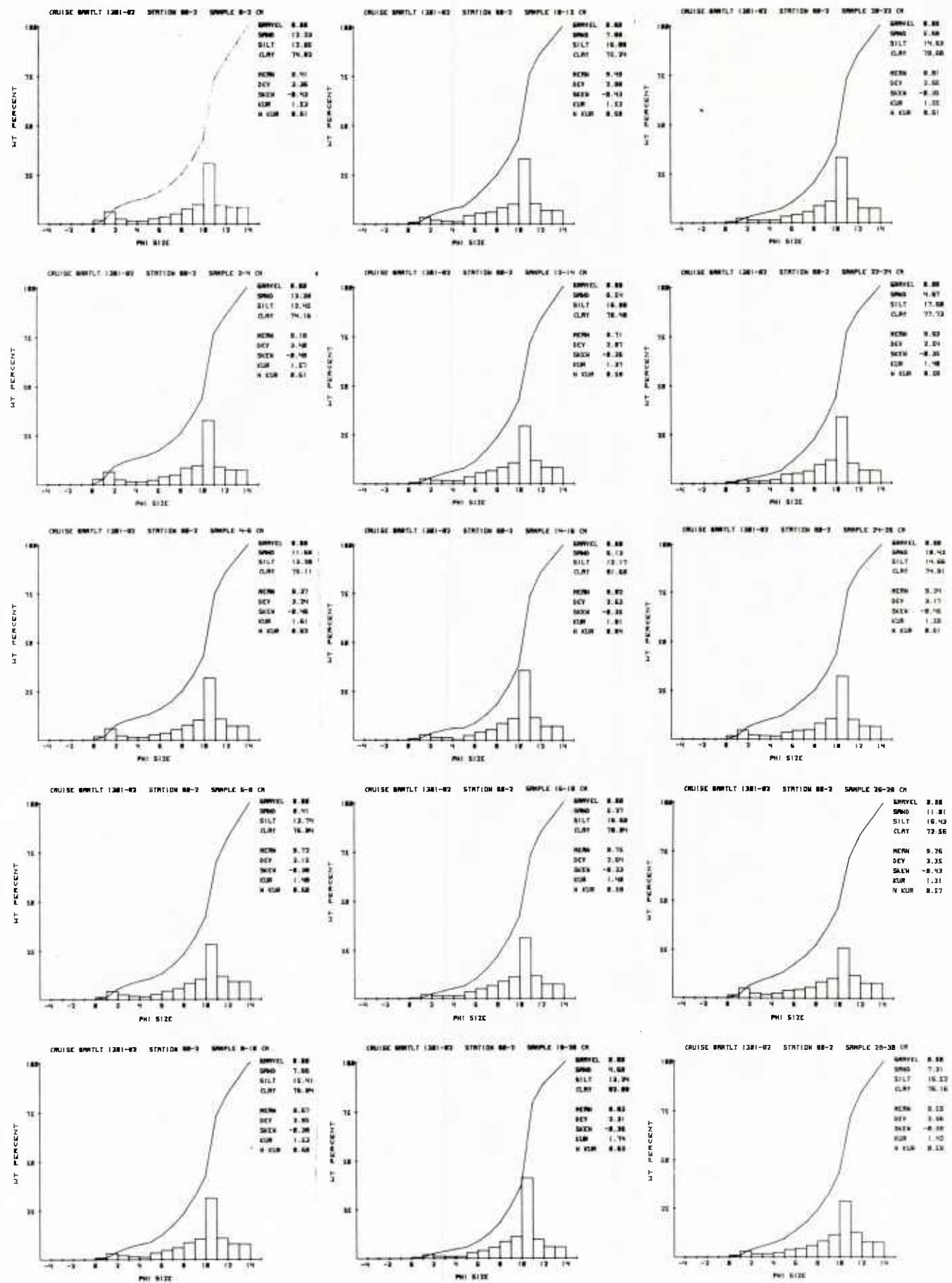


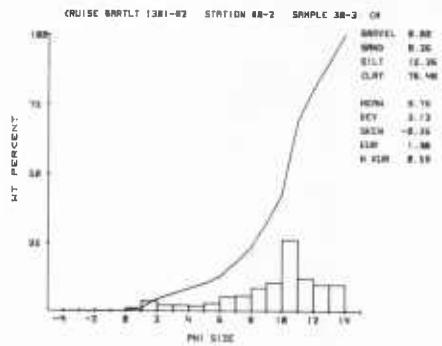










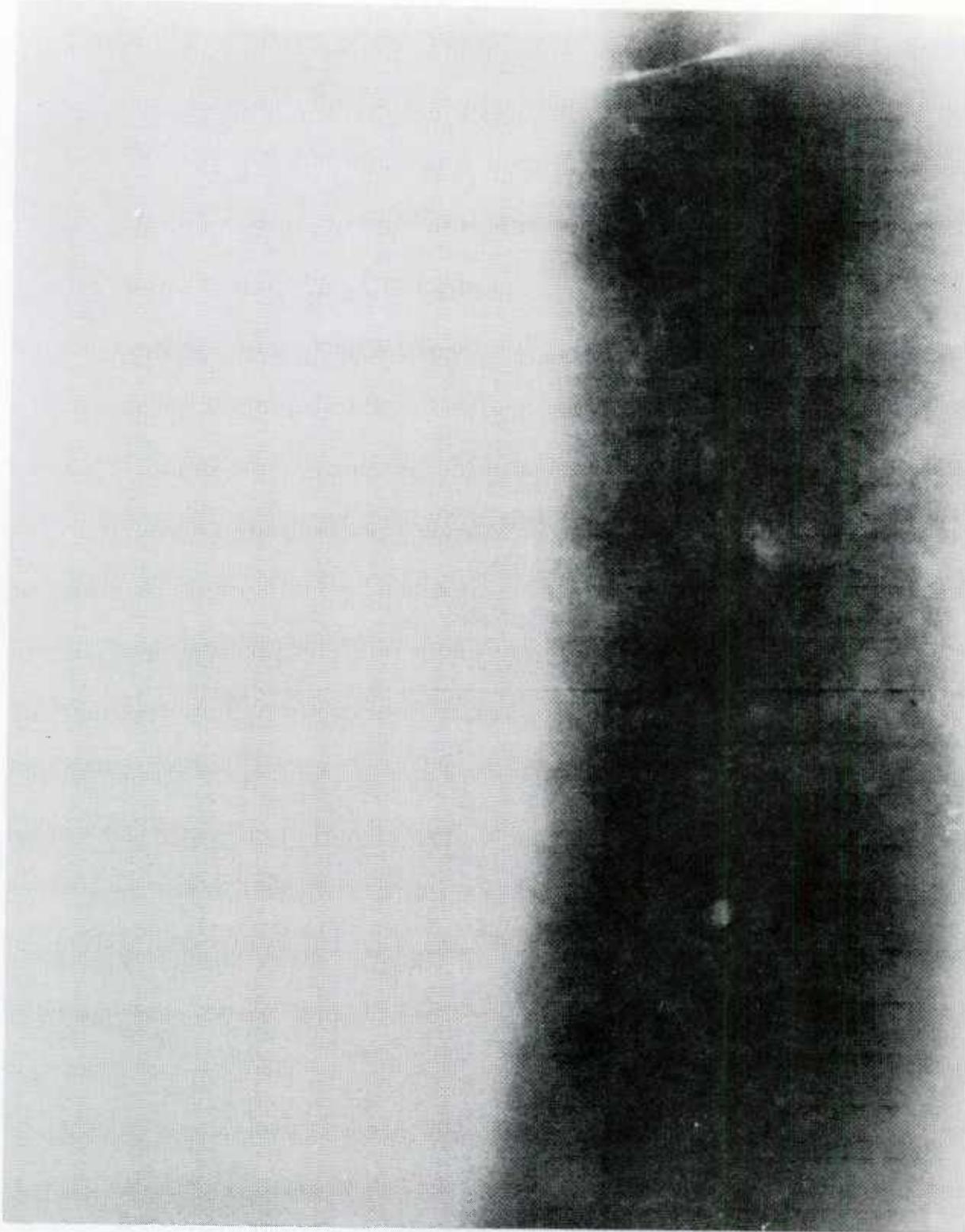


APPENDIX C  
X-RADIOGRAPHS OF SEDIMENTS COLLECTED  
FROM THE VENEZUELA BASIN

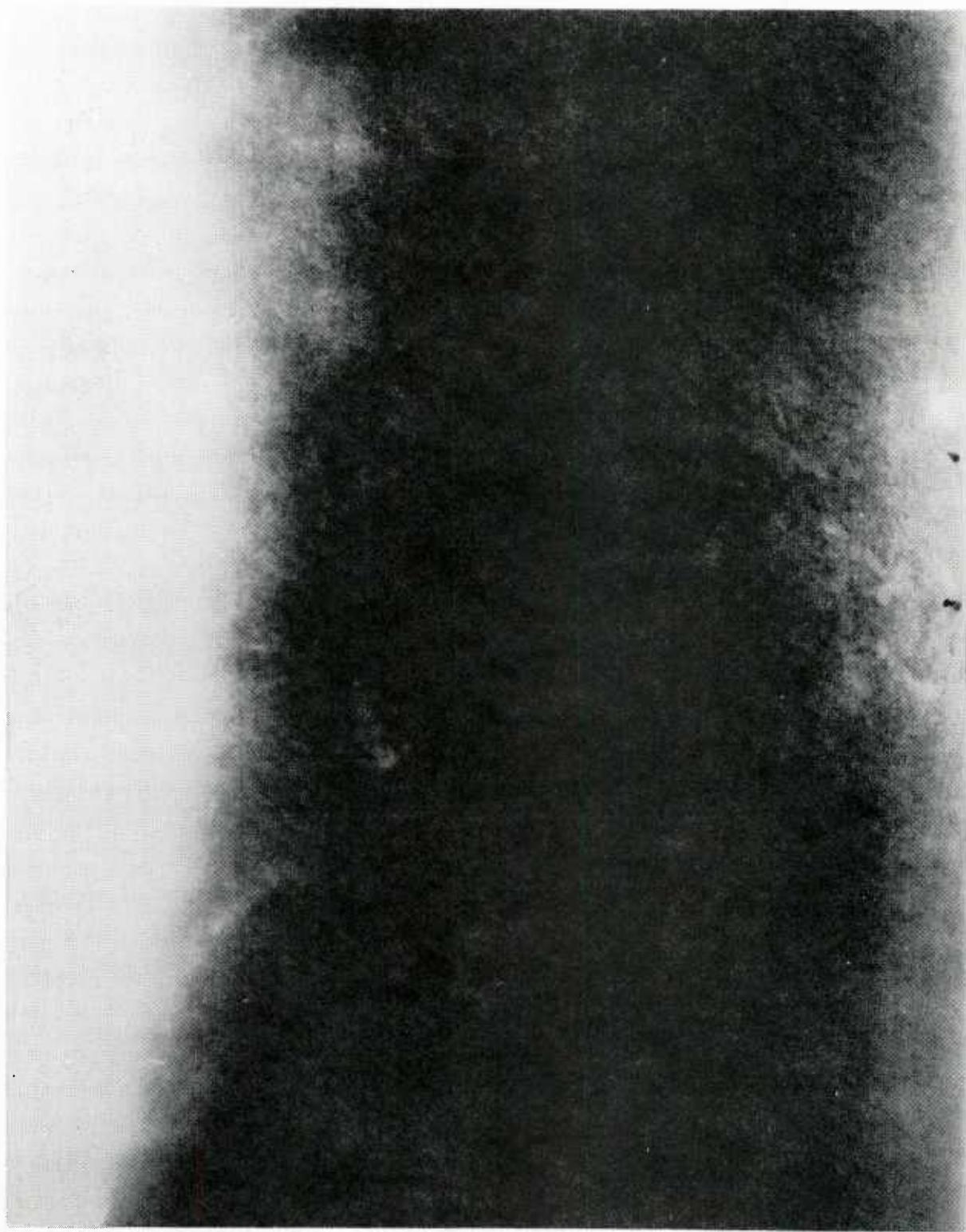
X-radiographs of sediments collected with X-ray boxes from intact box cores are presented. X-radiographs depict sedimentary/biological structure from eight stations and include X-radiographs from all three locations. Images are "positives" produced from the developed X-ray transparency and thus darker areas of the X-radiograph denote areas of greater sediment density.

<u>X-radiograph</u>	<u>Station</u>	<u>Location</u>	<u>Page</u>
15	22	1	234
16	22	1	235
17	26	1	236
18	30	1	237
19	30	1	238
20	51	2	239
21	51	2	240
22	51	2	241
23	54	2	242
24	54	2	243
25	54	2	244
26	74	3	245
27	74	3	246
28	74	3	247
29	77	3	248
30	77	3	249
31	80	3	250
32	80	3	251

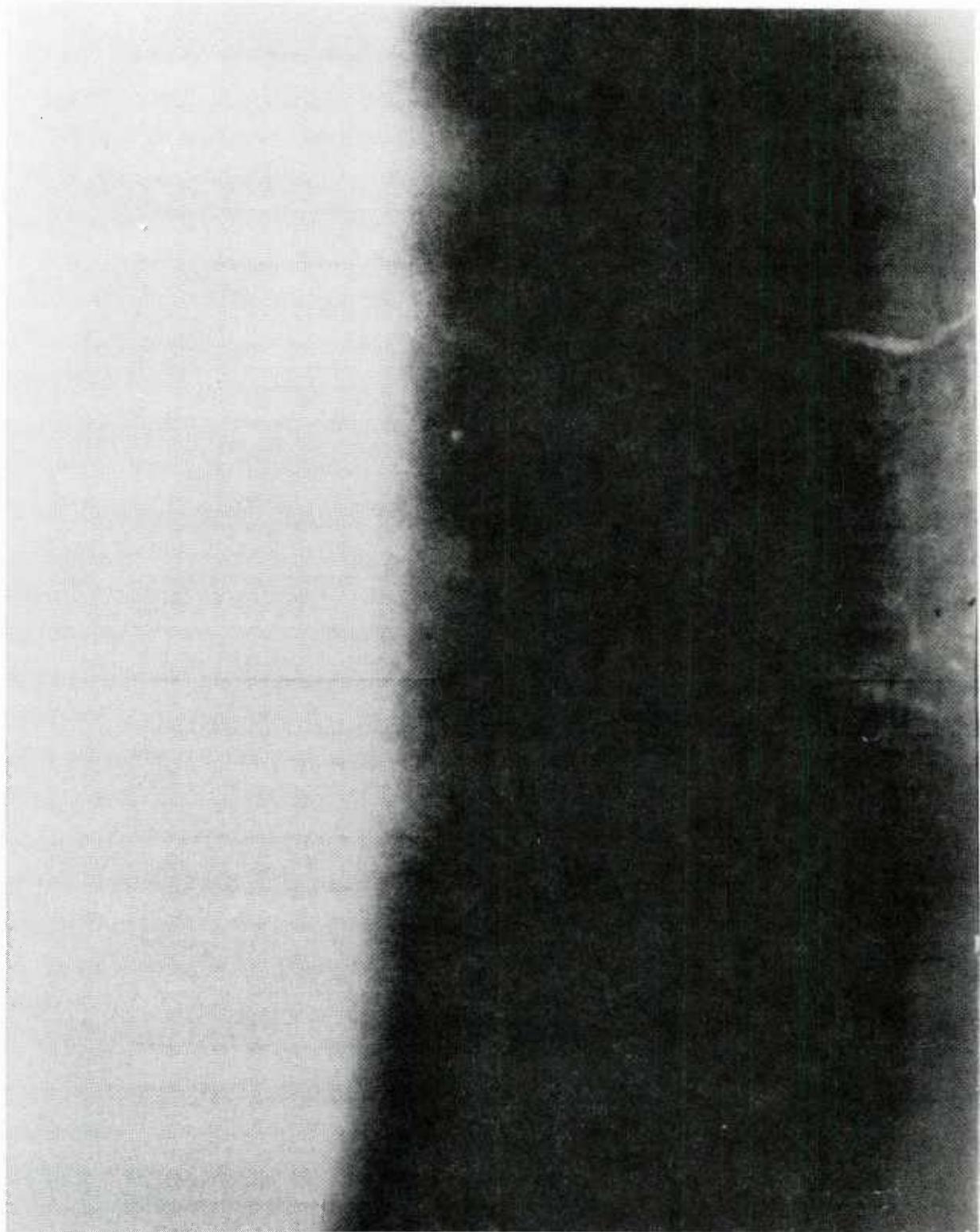
17



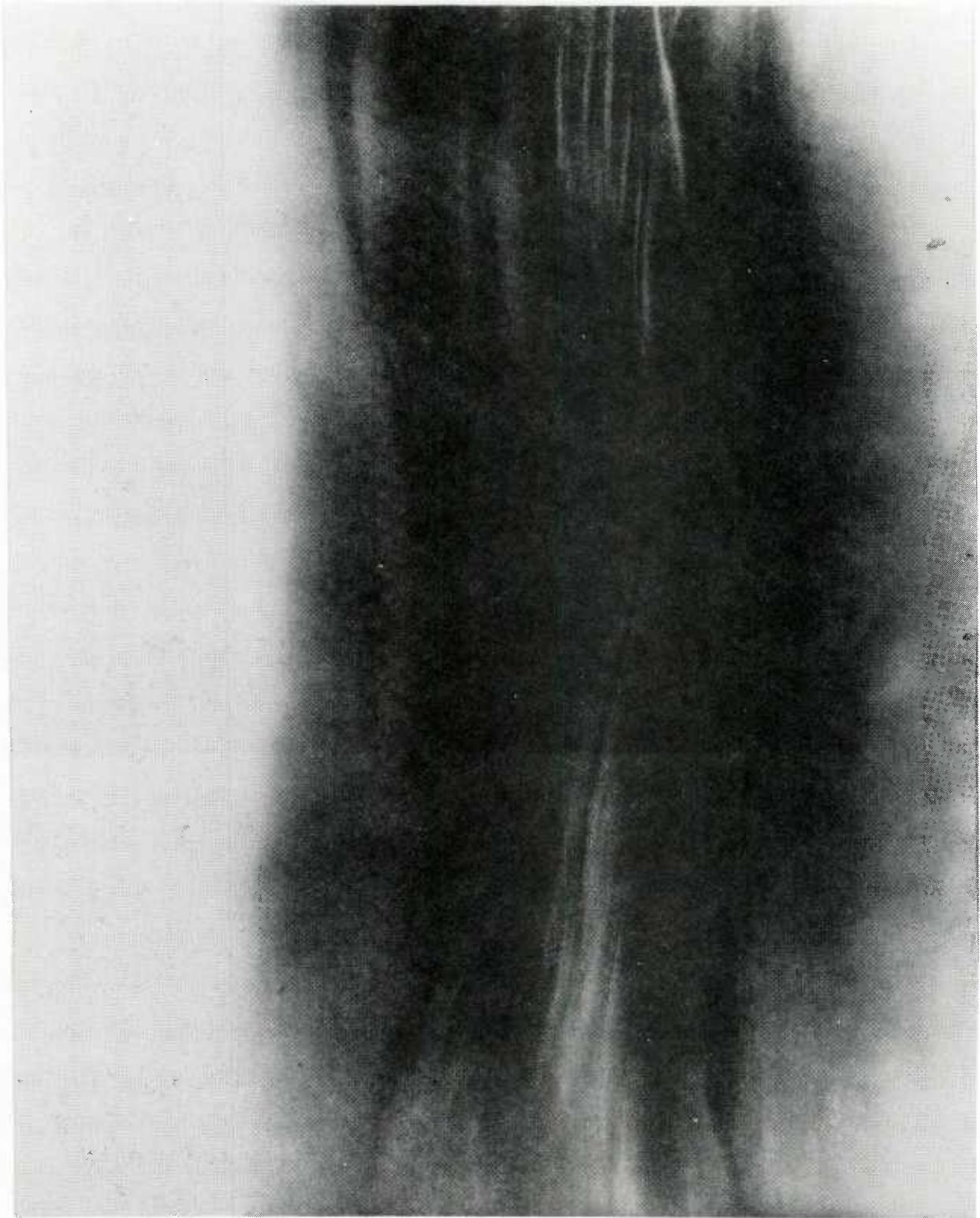
18



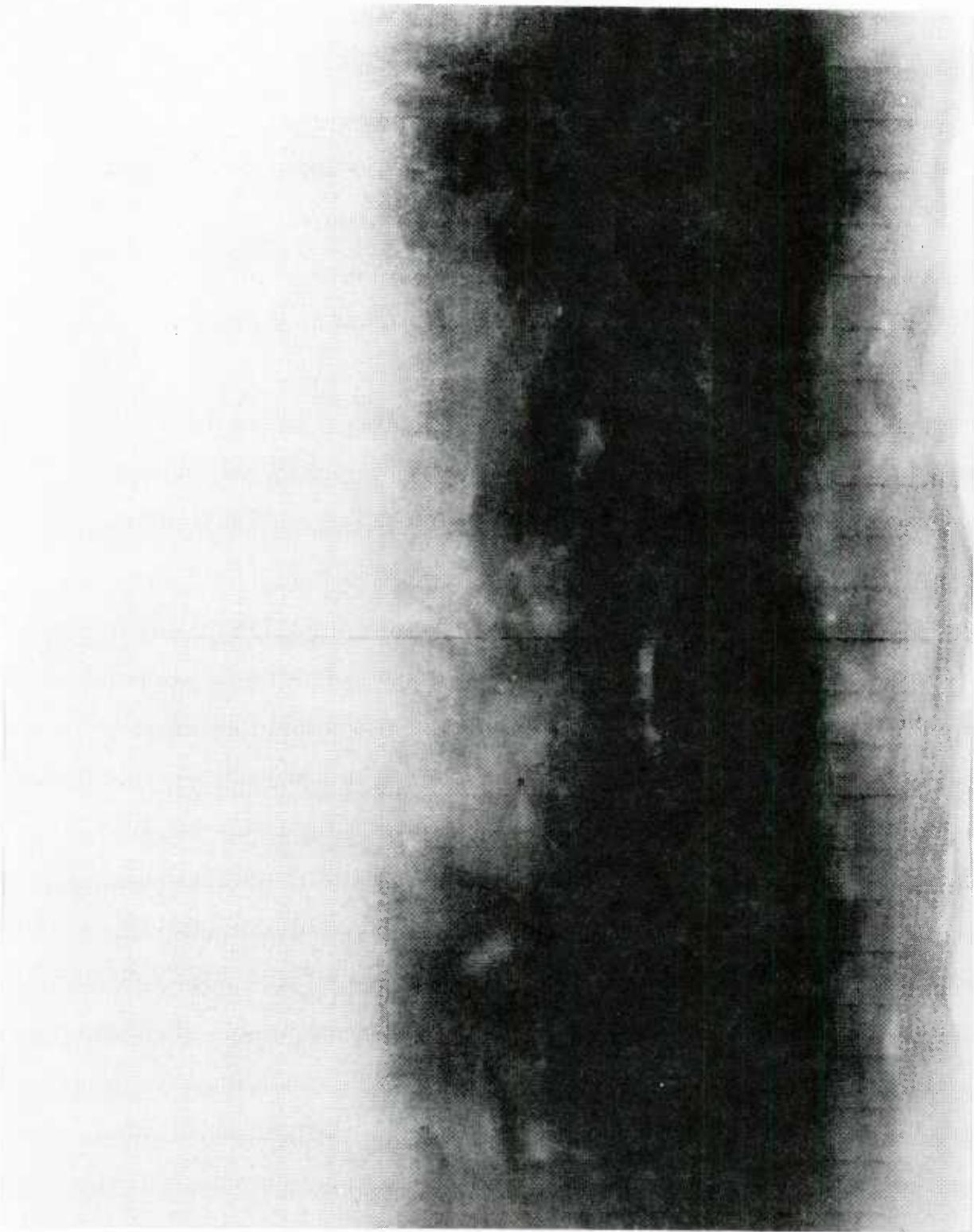
19



20



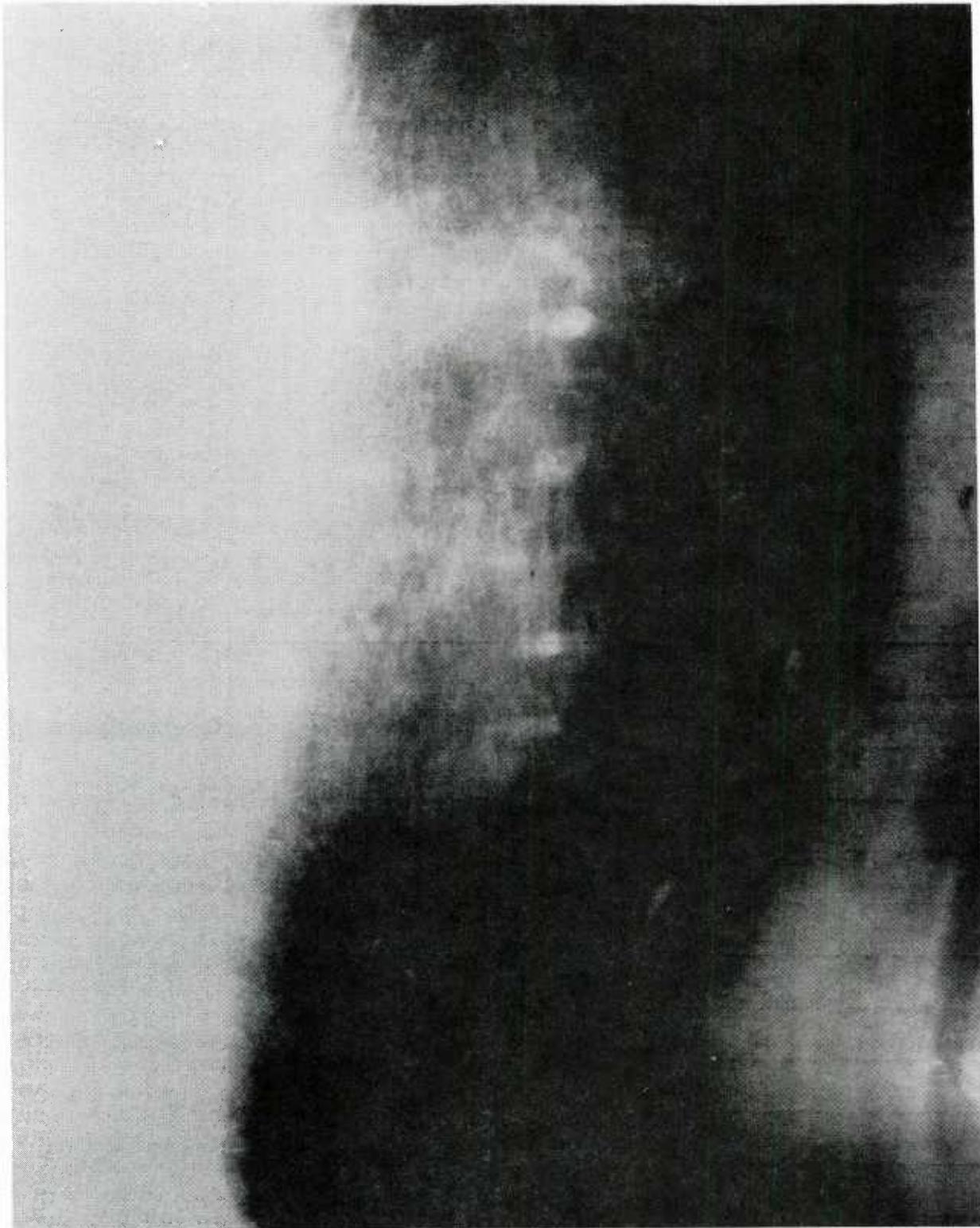
21



22



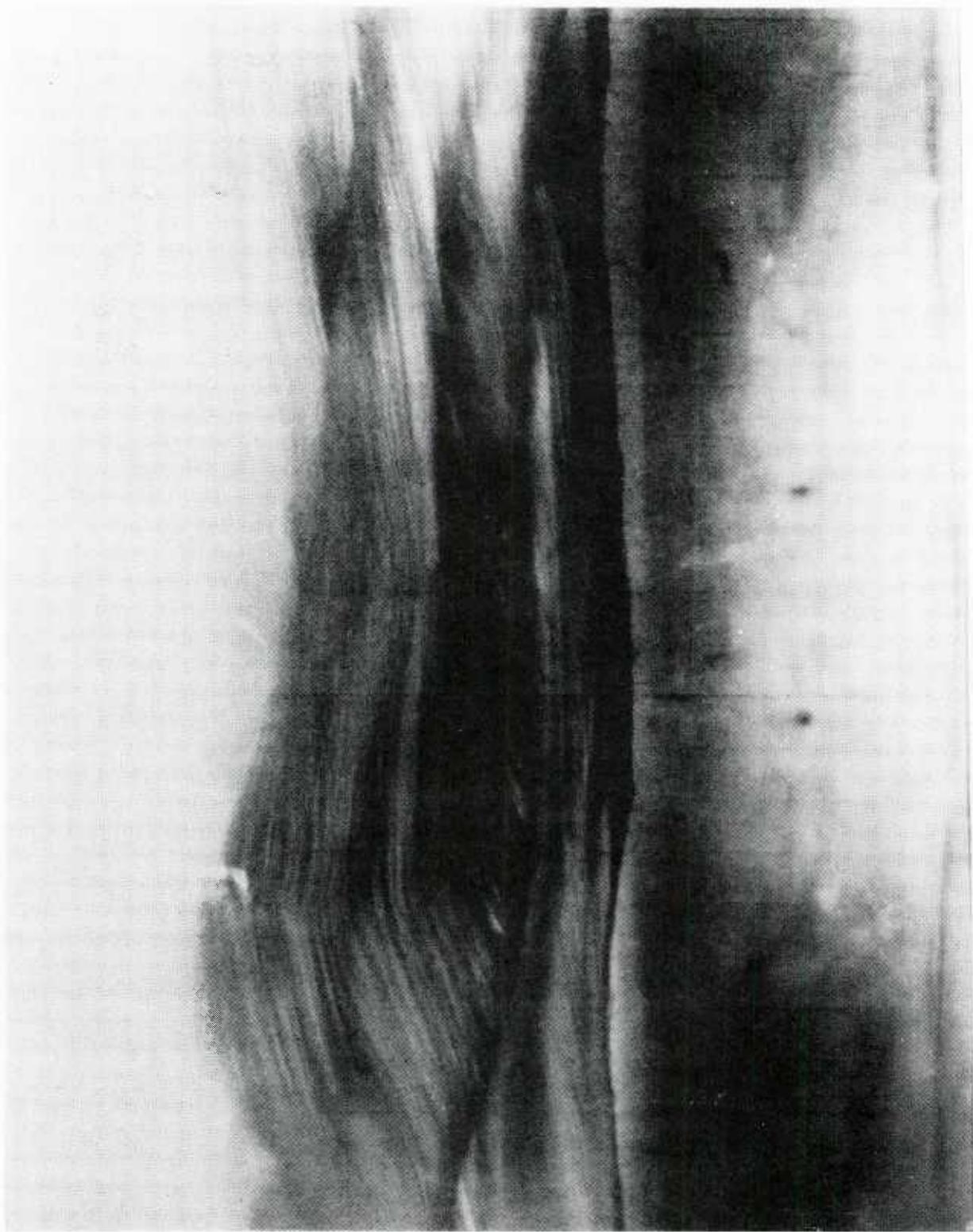
23



24



25

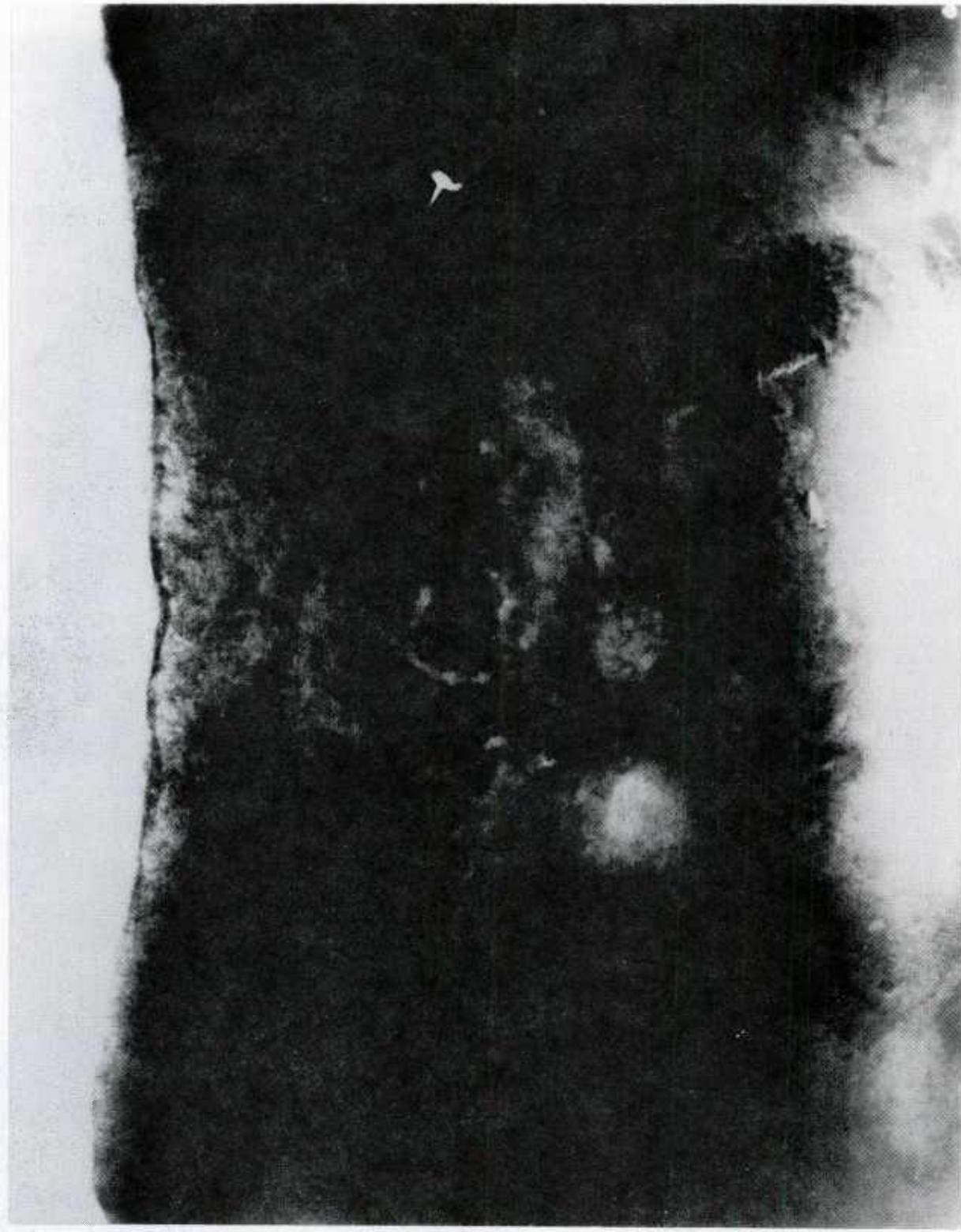


26



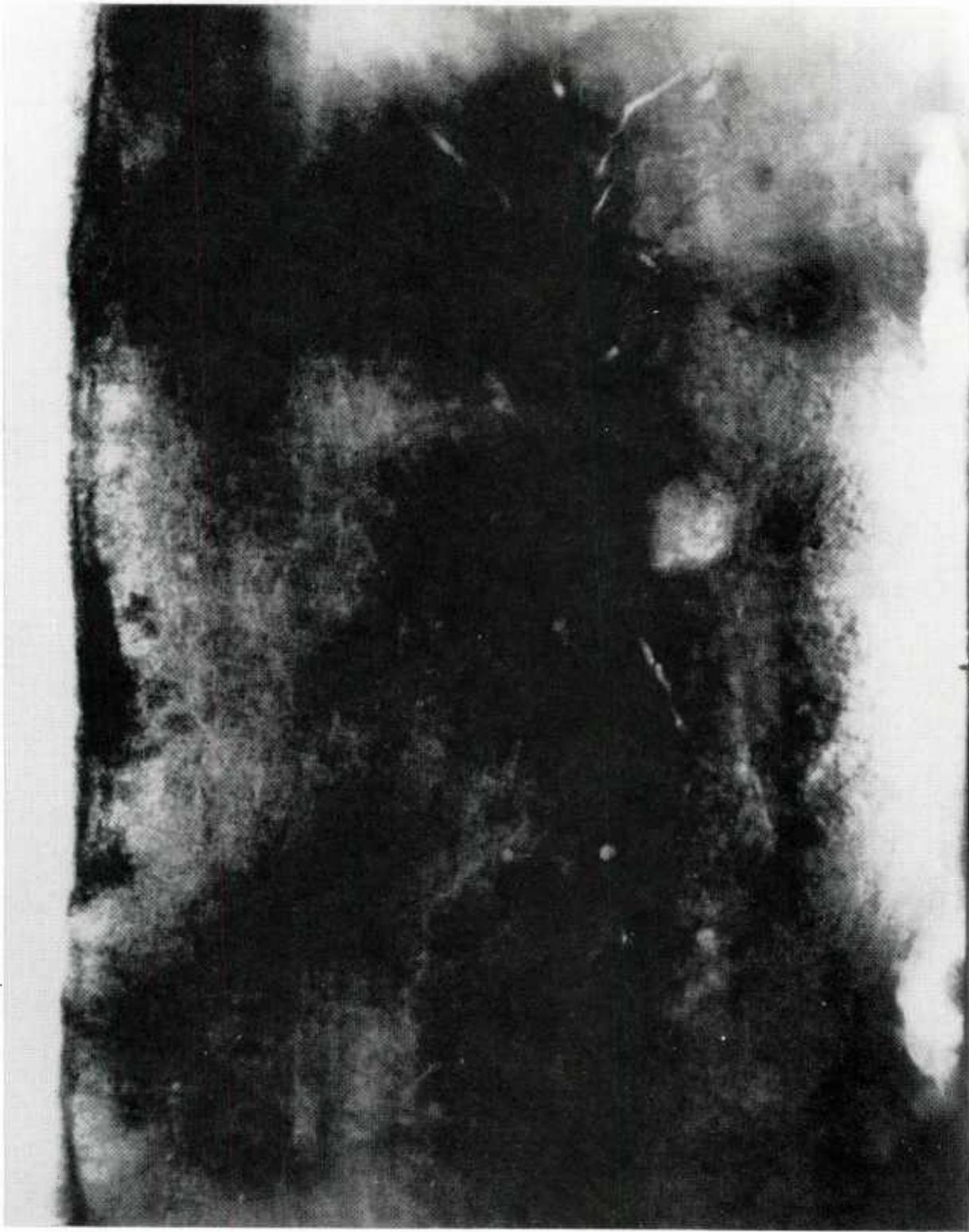
245

31



250

32



APPENDIX D  
COLOR DESCRIPTIONS OF CORES

Color descriptions are depicted as both Munsell®hue/value/chroma designations and soil color names. The "hue" refers to red, yellow, green, blue, and purple. The "value" refers to lightness. The "chroma" refers to strength (departure from a neutral of the same lightness). All descriptions were derived from subcores except at station 31 where the color was described from a freshly opened box core.

<u>Station</u>	<u>Depth (cm)</u>	<u>Hue/Value/Chroma</u>	<u>Color</u>
23(24)	0 to 3	10YR/6/3	Pale brown
	3 to 15	10YR/6/4	Light yellowish-brown
	15 to 39	10YR/6/3	Pale brown
31	0 to 15	10YR/6/4	Light yellowish-brown
	15 to 30	10YR/6/3	Pale brown
42(10)	0 to 6	10YR/6/4	Light yellowish-brown
	6 to 39	10YR/6/3	Pale brown
43(6)	0 to 6	10YR/6/4	Light yellowish-brown
	6 to 12	10YR/6/3	Pale brown
	12 to 15	10YR/6/4	Light yellowish-brown
	15 to 27	10YR/6/3	Pale brown
44(14)	0 to 3	10YR/5/3	Brown
	3 to 12	10YR/6/4	Light yellowish-brown
	12 to 33	10YR/6/3	Pale brown
48(1)	0 to 10	10YR/4/3	Brown/dark brown
	10 to 11	10YR/4/2	Dark grayish-brown
	11 to 13	10YR/2/2	Very dark brown
	13 to 14	10YR/4/1	Dark gray
48(4)	0 to 8	10YR/4/3	Brown/dark brown
	8 to 12	10YR/4/2	Dark grayish-brown
	12 to 14	10YR/2/2	Very dark brown
		10YR/3/3	Dark brown
		10YR/3/2	Very dark grayish-brown
	14 to 16	10YR/3/3	Dark brown
	16 to 18	10YR/3/1	Very dark gray
	18 to 20	10YR/4/1	Dark gray
	20 to 21.5	10YR/4/1	Dark gray
		10YR/3/1	Very dark gray
	21.5 to 28	10YR/5/1	Gray
	28 to 32	10YR/4/1	Dark gray
	32 to 34	10YR/3/1	Very dark gray
48(9)	32 to 34	10YR/5/1	Gray
		10YR/6/4	Light yellowish-brown
	34 to 36	10YR/4/1	Dark gray
		10YR/3/1	Very dark gray
	36 to 40	10YR/3/1	Very dark gray

<u>Station</u>	<u>Depth (cm)</u>	<u>Hue/Value/Chroma</u>	<u>Color</u>
67(5)	0 to 3	10YR/5/3	Brown
	3 to 6	10YR/4/3	Brown/dark brown
	6 to 9	10YR/3/3	Dark brown
	9 to 12	10YR/3/2	Very dark grayish-brown
		2.5Y/4/2	Dark grayish-brown
		10YR/5/1	Gray
		10YR/6/4	Light yellowish-brown
		2.5Y/3/2	Very dark grayish-brown
		2.5Y/5/2	Dark grayish-brown
	18 to 33	10YR/5/1	Gray
68(4)	0 to 6	10YR/4/3	Brown/dark brown
	6 to 9	10YR/3/3	Dark brown
	9 to 15	10YR/3/3	Dark brown
	15 to 21	5Y/3/1	Very dark gray
		5Y/4/2	Olive gray
		5Y/5/2	Olive gray
		5Y/4/4	Olive
		5Y/5/2	Olive gray
69(7)	0 to 6	10YR/4/3	Brown/dark brown
	6 to 9	10YR/3/3	Dark brown
	9 to 13	10YR/3/3	Dark brown
	13 to 16	10YR/3/2	Very dark grayish-brown
		10YR/5/3	Brown
		5Y/5/1	Gray
70(9)	0 to 6	10YR/4/3	Brown/dark brown
	6 to 9	10YR/4/3	Brown/dark brown
	9 to 16	5Y/4/2	Olive gray
		10YR/4/3	Brown/dark brown
		5Y/3/2	Dark olive gray
	16 to 18	5Y/5/2	Olive gray
	18 to 21	5Y/5/2	Olive gray
	18 to 21	5Y/4/2	Olive gray
71(8)	0 to 6	10YR/5/3	Brown
	6 to 15	10YR/5/3	Brown
	15 to 18	5Y/3/2	Dark olive gray
		5Y/5/2	Olive gray
		5Y/5/2	Olive gray
74(1)	0 to 6	10YR/4/4	Dark yellowish-brown
	6 to 15	10YR/5/4	Yellowish-brown
	15 to 30	5Y/3/2	Dark olive gray
		5Y/5/2	Olive gray

APPENDIX E  
COMPRESSIVE WAVE VELOCITY PROBE DATA

Compressional wave velocity ( $V_p$ , m/sec) as measured by probes inserted into intact box cores is presented. Velocity values are calculated for 20°C.

Station	Depth (cm)	Trial		$\bar{V}_p$
		1	2	
22	0	1485.9	--	1485.9
	1	1439.7	1520.2	1480.0
	2	1458.7	1483.4	1471.1
	3	1491.6	1492.5	1492.1
	4	1501.3	1484.3	1492.8
	5	1489.5	1495.3	1492.4
	6	1503.1	1495.5	1499.3
	7	1501.3	1498.0	1499.7
	8	1498.1	1496.3	1497.2
	9	1500.8	1488.2	1494.5
	10	1503.5	1502.6	1503.1
	11	1496.8	1510.9	1503.9
	12	1505.1	1525.5	1515.3
	13	1505.0	1532.3	1518.7
	14	1512.6	1527.7	1520.2
	15	1519.1	1518.1	1518.6
	16	1526.7	1521.4	1524.1
	17	1527.3	1515.9	1521.6
	18	1527.3	1535.0	1531.2
	19	1525.8	1534.0	1529.9
	20	1528.5	1533.8	1531.2
	21	1523.3	1531.2	1527.3
	22	1516.5	1531.0	1523.8
	23	1519.2	1516.4	1517.8
	24	1513.6	1523.1	1518.4
	25	1517.9	1510.7	1514.3
	26	1508.8	1511.6	1510.2
	27	1507.4	1515.3	1511.4
	28	1501.3	1515.3	1508.3
	29	1509.8	1514.0	1511.9
	30	1504.2	1511.6	1507.9
	31	1507.0	1507.4	1507.2
	32	1499.6	1513.2	1506.4
	33	1500.5	1503.8	1502.2
	34	1499.8	1506.4	1503.1
	35	1492.2	1507.5	1499.9
	36	1493.5	1503.1	1498.3
	37	1501.0	--	1501.0

Station	Depth (cm)	Trial				$\bar{V}_p$
		1	2	3	4	
31	0	--	--	--	--	--
	1	1470.2	1491.6	1467.4	1479.6	1469.7
	2	1450.1	1476.1	1464.2	1439.8	1457.6
	3	1479.3	1486.5	1507.7	1503.9	1494.4
	4	1476.0	1481.2	1490.9	1483.6	1482.9
	5	1484.9	1474.6	1490.3	1470.8	1480.2
	6	1488.1	1482.9	1506.0	1496.7	1493.4
	7	1488.3	1482.0	1496.7	1491.6	1489.7
	8	1486.3	1486.4	1487.4	1486.7	1486.7
	9	1502.7	1492.0	1514.0	1505.1	1503.5
	10	1513.5	1500.0	1493.1	1496.7	1500.8
	11	1520.3	1494.6	1510.1	1501.0	1506.5
	12	1518.5	1508.6	1509.3	1502.2	1509.7
	13	1522.5	1498.4	1523.9	1505.2	1512.5
	14	1522.3	1508.6	1505.6	1533.0	1517.4
	15	1523.0	1499.6	1539.3	1517.9	1520.0
	16	1532.2	1511.5	1527.5	1507.1	1519.6
	17	1534.6	1498.9	1528.9	1524.0	1521.6
	18	1525.8	1494.6	1529.9	1519.7	1517.5
	19	1534.2	1505.2	1531.7	1523.4	1523.6
	20	1522.0	1498.4	1527.8	1520.1	1517.1
	21	1517.8	1508.5	1525.5	1510.0	1515.5
	22	1520.9	1495.6	1530.8	1509.2	1514.1
	23	1520.3	1509.0	1525.0	1518.2	1518.1
	24	1514.6	1509.4	1517.3	1501.3	1510.7
	25	1508.7	1506.3	1508.3	1508.4	1507.9
	26	1513.0	1504.0	1518.2	1508.8	1511.0
	27	1509.3	1505.1	1516.4	1509.8	1510.2
	28	1501.9	1505.7	1506.4	1506.5	1505.1
	29	1502.3	1503.4	1512.6	1509.3	1506.9
	30	1503.6	1500.2	1509.2	1507.9	1505.2
	31	1502.6	1501.6	1498.3	1502.8	1501.3
	32	1512.3	1500.2	1501.0	1510.3	1506.0
	33	1493.5	1498.4	1496.1	1503.9	1498.0
	34	--	1497.5	1506.9	1502.4	1502.3
	35	--	1490.9	--	1501.7	1496.3

Station	Depth (cm)	Trial				$\bar{V}_p$
		1	2	3	4	
48	0	1514.8	--	--	--	1514.8
	1	1705.7	1575.9	1487.5	1454.8	1556.0
	2	1462.1	1751.4	1515.5	1489.6	1554.7
	3	1479.5	1468.4	1468.8	1477.4	1473.5
	4	1484.3	1483.0	1469.0	1478.5	1478.7
	5	1478.4	1488.1	1477.2	1478.5	1480.6
	6	1481.8	1484.1	1478.4	1479.7	1481.0
	7	1496.3	1488.5	1480.8	1478.2	1486.0
	8	1500.4	1488.8	1480.8	1488.0	1489.5
	9	1490.5	1487.9	1485.7	1480.6	1486.2
11	10	1492.0	1491.6	1491.6	1476.0	1487.8
	11	1487.2	1506.2	1493.4	1493.9	1495.2
	12	1507.5	1514.7	1499.1	1515.6	1509.2
	13	1515.8	1502.0	1499.5	1519.4	1509.2
	14	1516.1	1527.6	1501.5	1489.7	1508.7
	15	1517.0	1512.3	1506.1	1499.1	1508.9
	16	1525.7	1513.3	1523.2	1507.5	1517.4
	17	1507.7	1524.8	1536.9	1524.7	1523.5
	18	1501.7	1513.8	1498.7	1515.0	1507.3
	19	1511.2	--	1511.3	1504.7	1509.1
21	20	1514.4	--	1511.3	1502.9	1509.5
	21	1528.8	1524.8	1552.1	1506.5	1528.1
	22	1534.6	1551.1	1524.3	1508.1	1529.5
	23	1517.3	1548.7	1520.5	1515.1	1525.4
	24	1526.3	1553.7	1514.8	1568.8	1540.9
	25	--	1545.7	1540.8	1566.2	1550.9
	26	--	--	1527.7	1547.2	1537.5
27	--	--	1553.2	1537.3	1613.4	1568.0

Station	Depth (cm)	Trial				V <sub>p</sub>
		1	2	3	4	
82	0	1526.1	1568.5	1504.6	1553.7	1538.2
	1	1496.1	1490.9	1496.9	1450.1	1483.5
	2	1492.8	1513.7	1472.3	1502.4	1495.3
	3	1499.4	1511.4	1481.5	1482.2	1493.6
	4	1506.7	1513.8	1494.8	1484.5	1500.0
	5	1509.3	1514.9	1499.3	1484.2	1501.9
	6	1518.3	1515.9	1492.0	1486.5	1503.2
	7	1516.0	1528.7	1495.1	1492.9	1508.2
	8	1527.4	1525.8	1500.0	1503.1	1514.1
	9	1521.3	1538.7	1508.1	1500.6	1517.2
	10	1532.5	1530.4	1508.5	1504.8	1519.1
	11	1533.3	1526.0	1506.4	1495.0	1515.2
	12	1527.9	1532.4	1510.8	1495.8	1516.7
	13	1531.4	1535.2	1511.5	1492.8	1517.7
	14	1528.2	1532.4	1510.6	1500.7	1518.0
	15	1534.1	1540.9	1512.1	1501.6	1522.2
	16	1544.1	1541.4	1512.9	1507.5	1526.5
	17	1539.9	1544.4	1513.8	1503.8	1525.5
	18	1544.5	1539.4	1510.0	1511.8	1526.4
	19	1540.3	--	1512.9	--	1526.6

APPENDIX F  
SEDIMENT SHEAR STRENGTH MEASURED  
WITH HAND-HELD VANE SHEAR PROBE

Shear strength of sediments ( $\tau_p$ , g/cm<sup>2</sup>) was measured in undisturbed box cores with a 1.89 x 1.89 cm or a 2.54 x 2.54 cm vane. The larger vane was used at stations 23, 28, and 31 only.

Station	Depth		Trial						$\bar{r}_f$
	(in.)	(cm)	1	2	3	4	5	6	
23	1	2.54	12.43	12.43	12.43	12.43	9.95	14.92	13.77
	2	5.08	24.87	19.89	17.41	29.84	19.89	24.87	22.80
	3	7.62	44.76	54.70	42.27	34.81	49.73	64.65	48.44
	4	10.16	64.65	64.65	64.65	59.68	79.57	79.57	68.80
	5	12.70	94.50	74.60	89.51	77.08	79.57	84.54	83.30
	6	15.24	94.50	89.51	89.51	84.54	94.49	89.51	90.34
	7	17.78	79.57	89.51	89.51	49.57	84.54	89.51	80.37
	8	20.32	79.57	79.57	74.60	69.62	79.57	84.54	77.91
	9	22.86	69.62	69.62	69.62	64.65	79.57	79.57	72.11
	10	25.40	69.62	69.62	74.60	59.68	79.57	74.60	71.28
	11	27.94	59.68	69.62	69.62	62.16	59.68	64.65	64.24
	12	30.48	64.65	59.68	74.60	69.62	59.68	67.14	65.90
	13	33.02	44.76	59.68	44.75	59.68	59.68	59.68	54.71
	14	35.56	47.24	64.65	44.75	57.19	64.65	59.68	56.36
	15	38.10	47.24	44.76	44.75	59.68	59.68	59.68	52.63
	16	40.64	54.70	49.73	47.25	59.68	59.68	59.68	55.12
28	1	2.54	7.5	12.4	12.4	19.9	9.9	9.9	12.0
	2	5.08	24.9	34.8	19.9	24.9	27.4	39.8	28.6
	3	7.62	59.7	67.1	59.7	59.7	52.2	67.1	60.9
	4	10.16	64.6	89.5	77.1	84.5	77.1	92.0	80.8
	5	12.70	94.5	87.0	89.5	97.0	89.5	99.5	92.8
	6	15.24	94.5	99.5	79.6	104.4	89.5	119.4	97.8
	7	17.78	84.6	89.5	84.6	89.5	74.6	104.4	87.9
	8	20.32	84.5	82.1	84.5	94.5	74.6	89.5	85.0
	9	22.86	64.6	69.6	69.6	74.6	74.6	84.5	72.9
	10	25.40	59.7	79.6	74.6	67.1	69.6	69.6	70.0
	11	27.94	59.7	69.6	64.6	67.1	64.7	69.6	65.9
	12	30.48	64.6	49.7	49.7	64.7	59.7	59.7	58.0
	13	33.02	49.7	54.7	64.6	59.7	52.2	49.7	55.1
	14	35.56	49.7	52.2	67.1	49.7	49.7	49.7	53.0
	15	38.10	44.8	42.3	49.7	49.7	67.1	54.7	51.4
	16	40.64	47.2	49.7	54.7	49.7	--	--	50.3

Station	Depth		Trial						$\bar{f}$
	(in.)	(cm)	1	2	3	4	5	6	
31	1	2.54	14.9	14.9	19.9	19.9	19.9	12.4	17.0
	2	5.08	34.8	42.3	24.9	24.9	39.8	24.9	31.9
	3	7.62	64.7	67.1	57.2	44.8	54.7	69.6	59.7
	4	10.16	74.6	84.5	84.5	79.6	84.5	77.1	80.8
	5	12.70	89.5	114.4	94.5	106.9	84.5	89.5	96.6
	6	15.24	99.5	114.4	119.4	104.4	84.5	119.4	106.9
	7	17.78	99.5	99.5	97.0	106.9	99.5	87.0	98.2
	8	20.32	99.5	89.5	84.5	89.5	84.5	84.5	88.7
	9	22.86	79.6	69.6	74.6	67.1	74.6	67.1	72.1
	10	25.40	74.6	64.6	64.6	72.1	67.1	67.1	68.4
	11	27.94	59.7	67.1	72.1	69.6	72.1	64.6	67.5
	12	30.48	59.7	59.7	64.6	67.1	64.6	64.6	63.4
	13	33.02	54.7	54.7	62.2	57.2	39.8	49.7	53.1
	14	35.56	44.8	47.2	54.7	54.7	44.8	64.6	51.8
	15	38.10	42.3	42.3	52.2	52.2	39.8	62.2	48.5
	16	40.64	--	--	39.8	42.2	--	--	41.0
48	1	2.54	2.5	2.5	2.5	2.5	5.0	--	3.0
	2	5.08	12.4	--	14.9	12.4	10.9	--	12.7
	3	7.62	14.9	29.8	24.9	29.8	39.8	--	27.8
	4	10.16	47.2	59.7	49.7	64.6	104.4	--	65.1
	5	12.70	94.5	223.8	149.2	198.9	248.7	--	183.0
	6	15.24	159.1	124.3	149.2	134.3	119.4	--	137.3
	7	17.78	74.6	49.7	49.7	34.8	29.8	--	47.7
	8	20.32	34.8	19.9	24.9	14.9	29.9	--	24.9
	9	22.86	17.4	19.9	39.8	12.4	29.9	--	23.9
	10	25.40	14.9	19.9	19.9	34.8	39.8	--	25.9
	11	27.91	24.9	29.8	24.9	24.9	34.8	--	27.9
	12	30.48	22.4	29.8	29.8	39.8	39.8	--	32.3
	13	33.02	34.8	39.8	44.8	134.3	159.1	--	82.6
	14	35.56	94.5	104.4	159.1	124.3	134.3	--	123.3
	15	38.10	149.2	129.3	99.5	59.7	79.6	--	103.5
	16	40.64	--	--	--	54.7	69.6	--	62.2

Station	Depth		Trial						$\bar{\tau}_f$
	(in.)	(cm)	1	2	3	4	5	6	
55	1	2.54	4.9	12.4	4.9	4.9	4.9	4.9	6.2
	2	5.08	14.9	17.4	19.9	14.9	9.9	14.9	15.3
	3	7.62	29.8	34.8	34.8	29.8	29.8	44.8	34.0
	4	10.16	49.7	69.6	59.7	49.7	69.6	69.6	61.3
	5	12.70	169.1	159.1	134.3	149.2	119.4	134.3	144.2
	6	15.24	134.3	149.2	119.4	124.3	114.4	134.3	129.3
	7	17.78	34.8	24.9	17.4	29.8	--	--	26.7
	8	20.32	24.9	24.9	19.9	29.8	--	--	24.9
	9	22.86	19.9	14.9	14.9	19.9	--	--	17.4
	10	25.40	29.8	19.9	19.9	24.9	--	--	23.6
	11	27.91	29.8	19.9	29.9	29.9	--	--	27.4
	12	30.48	29.9	24.9	24.9	24.9	--	--	26.2
	13	33.02	44.8	34.8	29.9	39.8	--	--	37.8
	14	35.56	134.3	104.4	49.7	104.4	--	--	98.2
	15	38.10	238.7	208.5	268.5	208.9	--	--	231.2
	16	40.64	69.6	--	54.7	59.7	--	--	61.3
74	1	2.54	29.8	14.9	14.9	14.9	14.9	14.9	17.4
	2	5.08	44.8	44.8	44.8	49.7	34.8	29.8	41.5
	3	7.62	74.6	64.6	74.6	89.5	64.6	54.7	70.4
	4	10.16	94.5	104.4	104.4	114.4	84.5	84.5	97.8
	5	12.70	119.4	129.3	109.4	124.3	119.4	94.5	116.1
	6	15.24	149.2	149.2	129.3	208.9	134.3	129.3	150.0
	7	17.78	179.0	263.6	218.8	179.0	258.6	169.1	211.4
	8	20.32	198.9	253.6	198.9	218.8	303.4	238.7	235.4
	9	22.86	184.0	248.7	218.8	263.6	238.7	228.8	230.4
	10	25.40	218.8	238.7	218.8	308.3	293.4	189.0	244.5
	11	27.91	273.5	248.7	189.0	288.4	258.6	189.0	241.2
	12	30.48	243.7	228.8	198.9	228.8	238.7	238.7	229.6

Station	Depth		Trial						$\bar{r}_f$
	(in.)	(cm)	1	2	3	4	5	6	
80	1	2.54	14.9	14.9	14.9	9.9	14.9	14.9	14.1
	2	5.08	44.8	29.8	24.8	29.8	29.8	29.8	31.5
	3	7.62	54.7	54.7	34.8	49.7	49.7	54.7	49.7
	4	10.16	49.7	44.8	64.7	84.5	44.8	64.7	58.9
	5	12.70	69.6	84.5	99.5	119.4	59.7	74.6	84.6
	6	15.24	79.6	89.5	109.4	129.3	84.5	99.5	98.6
	7	17.78	129.3	129.3	129.3	149.2	94.5	119.4	125.2
	8	20.32	174.0	208.9	169.1	218.8	169.1	134.3	179.0
	9	22.86	179.0	129.3	228.8	228.8	198.9	184.0	191.5
	10	25.40	179.0	233.7	248.7	174.1	208.9	248.7	215.5
	11	27.91	169.1	223.8	248.7	248.7	203.9	189.0	213.9
	12	30.48	198.9	119.4	189.0	189.0	169.1	218.8	180.7
82	1	2.54	9.9	9.9	9.9	14.9	14.9	19.8	13.2
	2	5.08	19.9	29.8	24.9	29.8	34.8	34.8	29.0
	3	7.62	29.8	44.8	44.8	49.7	54.7	59.7	47.3
	4	10.16	54.7	54.7	39.8	74.6	79.6	94.5	66.3
	5	12.70	99.5	79.6	79.6	74.6	104.4	109.4	91.2
	6	15.24	114.4	119.4	129.3	99.5	114.4	144.2	120.2
	7	17.78	139.2	139.2	149.2	144.2	149.2	164.1	147.5
	8	20.32	208.9	174.1	238.7	253.6	313.3	268.5	242.9
	9	22.86	213.8	238.7	293.4	273.5	268.5	303.4	265.2
	10	25.40	233.7	288.4	218.8	238.7	233.7	198.9	235.4
	11	27.94	261.5	238.7	218.8	293.4	268.5	288.4	261.6
	12	30.48	223.8	149.2	348.1	273.5	198.9	308.3	250.3
	13	33.02	174.1	193.9	193.9	198.9	203.9	179.0	190.6
	14	35.56	--	--	318.3	179.0	174.1	248.6	230.0

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